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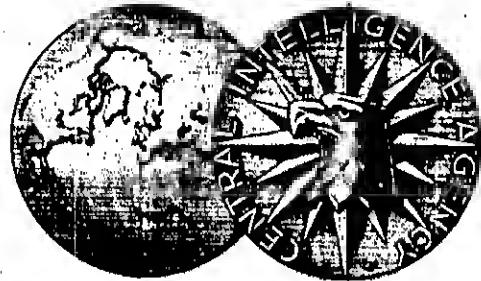
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KOREA: EVALUATION OF MAPS

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Goc, C. H. R. B. Bro. M. D. P.



M-7

Published November 1948

CENTRAL INTELLIGENCE AGENCY

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INTRODUCTION

1. Purpose of the Study. This report was prepared to aid those engaged in basis research on Korea. It can also be used as a map guide by U.S. Government personnel stationed in Korea, or by those training for such assignments.

2. Scope. Although numerous subjects are covered, this summary is not intended to be a complete bibliography of all maps portraying Korea.

First emphasis is placed on readily available maps; however, where maps not readily available seem particularly important, they are also noted.

Maps of a general character which bring out relationships between Korea and nearby countries are included.

An effort was made to recommend the minimum number of maps necessary to cover adequately a particular subject or function. Maps with texts in Occidental languages are given preference.

Many of the maps cited appear in the monthly Summation of United States Army Military Government Activities in Korea. Some of these deal with fairly stable distribution patterns while others pertain to matters that are subject to rapid fluctuations such as retail prices, food stocks, production of marine products, etc.

The maps from the monthly summations described herein were the most recent of their types available at the time this information was assembled; however, many of these dealing with rapidly changing relationships may be rendered obsolete in the near future by the appearance of new maps, of similar types, in later summation reports.

3. Arrangement. Part One recommends the best maps and map materials for special purposes. After each heading are noted titles and numbers of pertinent

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maps, gazetteers, atlases, and other materials, along with brief comparative and evaluative remarks. The numbers noted in this section refer to an annotated list (Part Two) where each item is briefly described and where information on publishers, publication dates, availability, and reproduction possibilities is given. Where it is of special importance, some information on publishers, dates, etc. is also included in the Part One, analytical discussion.

Throughout the report, numbers of maps, atlases, gazetteers, etc. are given in parentheses. Regardless of where a given number appears, it invariably refers to the same item.

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PART ONE

MAPS AND MAP MATERIALS

RECOMMENDED FOR SPECIAL PURPOSES

I. GENERAL

A. Desk Size Maps for Ready Reference Use

The majority of the maps discussed in this report are suitable for desk use. Outstanding among those of a general type are (1) Korea Roads and Railroads, 1:2,000,000, which presents considerable cultural data on a vivid portrayal of relief. Map (2) Korea Special Strategic Map, 1:2,000,000, is similar only simplified. On a somewhat larger scale is (3) Korea (Chōsen), 1:1,200,000, which emphasizes the cultural pattern and provides a particularly good picture of the distribution of towns and villages. Map (4) Japan and Eastern Asia, 1:7,500,000, and the National Geographic Society Map, (137) Japan and Korea, 1:3,000,000, are general maps on which Korea is centered and shown in relation to adjacent countries of the Far East.

B. Wall Maps

There appear to be no maps of Korea prepared especially as wall maps.

The Korea sheet of (5) Japan Road Map, 1:1,000,000, can be used as a wall map where emphasis on transportation is desired but the place names are printed in type sizes too small to permit reading at a distance.

Map (27) Korea, 1:1,000,000, a single sheet map covering all of Korea, can also be used as a wall map. It presents place names in very small type but the portrayal of relief with plastic shading is exceptionally vivid.

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Although only a few of its many place names are printed in large type, Map (23) Map of Japan and Adjacent Regions, 1:2,000,000, can be effectively used as a wall map where there is a need for illustrating Korea's situation in relation to Japan, Eastern China, Manchuria, and nearby areas of the USSR. This map, which is accompanied by a gazetteer, shows relief with layer colors and presents a pattern of cultural data (including vivid international boundaries) commensurate with its scale.

All of the three maps cited above have romanized place names and legends in English.

C. Atlases

There is one available atlas devoted solely to Korea. This is (14) Geological Atlas of Chosen, an excellent specialized atlas being published progressively in bound folios. Each of the 19 folios published to date contains several sheets of a 1:50,000 geological series (geological data superimposed on the regular 1:50,000 topographic sheets), special maps at larger scales, profiles, and interpretive text material in both English and Japanese.

These 15 folios now available in the United States provide coverage for 13 small, widely scattered areas which aggregate about 10% of Korea's total area. Although the coverage is not extensive, the mapped areas are generally mineral producing sites of considerable geological interest.

Many atlases of Japan include maps and other data pertinent to Korea. Prominent among the atlases of this type is (13) Climatic Atlas of Japan and Her Neighboring Countries, a specialized atlas with over one hundred and fifty colored maps providing very complete climate data for Japan, Korea, Formosa, and parts of Manchuria. This is an important source for reliable climate information on Korea.

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The entire text is in both English and Japanese.

The remaining atlases of Japan which also include Korea maps, are of a more general type. Atlas (9) Shin Nippon Zuchō (New Atlas of Japan) - Japanese text - is noted for its extensive gazetteer and reliable information on Japanese readings for place names in Korea.

Atlas (8) Dai Nippon Fu-, Ken-Betsu etc. (Atlas of Japan, etc.) contains extensive breakdown lists of civil divisions in Japan and Korea. It includes a map showing to (province) and kun (county) boundaries in Korea. Unfortunately, the names and boundary data on this map are illegible on the photo-offset reproductions prepared by the Division of Naval Intelligence.

The three remaining atlases; (10) Atlas of Japan, (11) New Map Collection, and (12) Kleiner Atlas von Japan, are small atlases quite similar in appearance and scope. All emphasize Japan but include small-scale general and subject maps pertinent to Korea. They also have gazetteers though these are not as complete as the name list appearing in previously mentioned (9) Shin Nippon Zuchō (New Atlas of Japan). Of these three atlases, only (12) Kleiner Atlas von Japan (in German) has a Romanized gazetteer.

There is little to choose between atlases (10), (11) and (12) for each offers subject maps not duplicated in the other two. However, (10) Atlas of Japan, seems to contain the most detailed and complete selection of Korea maps.

D. Place Name Information

The prime source for information on place name transliteration methods and place name source is (15) Guide to Geographical Names in Korea (Chōsen), published by the U.S. Board of Geographic Names.

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E. Gazetteers and Other Locational Aids

In preparing the listing that follows, an attempt was made to arrange the various gazetteers, indexes, and place name lists in the order of their potential usefulness to readers unfamiliar with oriental languages. This proved difficult because each of the various locational aids noted in this section is useful in a particular way.

Number (20) Gazetteer to Maps of Korea, is the most important locational guide for Korea. It contains about 18,000 names. Location is indicated with geographical coordinatee and grid referencee. Names are from the first edition sheets of (123) Korea, 1:250,000, AMS L551, except for a small area in the extreme northeast where two sheets from (195) Manchuria, 1:500,000, AMS L401 were used. The previously cited (15) Guide to Geographical Names in Korea (Chosen), liets this gazetteer as one of the beet available sources for romanized Korean place namee.

Number (21) Place Name Index for Korea (Choeen) is uniques in giving romanized Korean place name forms with their equivalent Sino-Korean charactere as well as the Korean alphabet (onmun) epellinge. Location is by reference to attached 1:1,500,000 map on which names are romanized according to their Japanee readings.

Number (22) Map of Korea, 1:1,000,000, includes a gazetteer of 1,300 entries with romanized (McCune-Reischauer system) names keyed to a marginal grid. Where only the names of prominent places are needed, this is a very satisfactory location guide.

Number (23) Map of Japan and Adjacent Regions, 1:2,000,000, includee an index in which romanized Korean names are indexed with those of Japan in an alphabetical sequence of about 4,500 entries. Sino-Korean charactere are also given.

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Location is indicated with grid reference to the map.

Number (24) Sailing Directions for Siberia and Chōsen, H.O. 122, includes an alphabetized index presenting romanized names from various sources. Locations are indicated with page references to the text where coordinates are given along with descriptive information and references to hydrographic charts.

Five of the previously cited atlases (8), (9), (10), (11), and (12), contain place name lists or indices but none can be considered a general-purpose locational aid. The one with romanized names (12) has a very abbreviated gazetteer. None are widely available.

F. Plotting Maps

For general plotting work, (25) Korea, 1:1,000,000, a blue line base map presenting fairly complete cultural data, appears to be best. Where emphasis on terrain is desired, map (27) Korea, 1:1,000,000, can be used for plotting. If it is desirable to show Korea in relation to adjacent areas, the various sheets of map (26) OSS Theatro Map, 1:1,500,000, will serve as a plotting map. This set was designed so that any number of sheets may be joined to cover any desired area.

Map (45) Highways in Korea, 1:3,000,000, is a small-scale base map emphasizing Korea's road net. It is suitable for illustrating reports and for plotting data related to the road pattern.

II. PHYSICAL FEATURES

A. Terrain

Map (123) Korea, 1:250,000, AMS L551 (AMS 2), provides nearly complete coverage on 41 sheets. Although it offers only a moderately detailed portrayal of Korea's terrain, availability of the sheets, English text, connection with a gazetteer, and other factors suggest that this is the most suitable terrain map of Korea for general use.

Where more detailed terrain information is needed, either (114) Korea, 1:50,000, AMS L751, or (113) Korea, 1:50,000 (Japanese text) can be used. Map (113) Korea, 1:50,000, the basic topographical map of the country, provides complete areal coverage. The U.S. Army Map Service has reproduced more than half the sheets in this set as (114) Korea, 1:50,000, AMS L751, with romanized names overprinted in purple. These reproductions provide complete coverage for Korea south of the 38th parallel and scattered coverage north of the 38th parallel.

Prominent among the smaller scale terrain map is (32) Eastern Asia, 1:1,000,000, which shows relief distinctly with contours and layer colors while also presenting considerable cultural data. This series follows the sheet pattern of the International Map of the World. By bringing in adjacent sheets the coverage can be conveniently extended to illustrate relationships between Korea and nearby countries.

Map (27) Korea, 1:1,000,000, a single sheet map, uses plastic shading to present an exceptionally clear picture of Korea's terrain. It also locates a few main cultural features.

Map (195) Manchuria, 1:500,000, AMS L401, a medium scale topographical set, covering Korea as far south as the 40th parallel, is useful in considering problems centering around the Korea-Manchuria border area.

The maps listed below were designed to illustrate special relationships in connection with Korea's terrain. Each map covers the whole country on a single sheet.

(6) Korea (Summary) Terrain Intelligence,

Contains three maps of this type. Suitability for Airfields, after page 54, locates and classifies selected areas according to suitability for airfield construction. Cross Country Trafficability, page 29, classifies Korea's land surface according to capacity for carrying vehicular and pedestrian traffic. Water Supply: General Features, page 48, indicates main terrain types and shows availability of water for each type. All of the maps are scaled at 1:1,000,000 and each presents the specialized terrain data on a background of contours and detailed cultural information.

(36) Korea, Slopes, Terrain Regions, and Routes,

Presents detailed data on the angle of slope and brings out relationships between terrain and important land routes (both road and railroad).

(38) Korea, Relief and Terrain Regions, 1:1,900,000.

A useful small-sheet physical map on which the ruggedness of the terrain is shown with oblique shading and elevation is indicated with layer colors.

(35) Korea, Vegetation and Terrain Regions,

Delineates and names terrain regions. Shows relationships between terrain and vegetation.

Other terrain maps, all with Japanese texts, are (94) Korea, 1:10,000, an old, irregularly aligned series of detailed city-vicinity maps, and (192) Korea, 1:200,000, a topographical set covering all of Korea. The 1:200,000 series was for some time the most widely used medium scale map of Korea but, for American users, it now offers

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little that is not covered better on the more recent, multi-colored sheets of (123) Korea, 1:250,000, AMS L551 (AMS 2).

B. Climate

Most of the available weather and climate maps pertinent to Korea are associated with accompanying text and statistical material.

One of the best, well-rounded, summaries on Korea's weather and climate is (68) A Climatic Summary of Korea. In addition to a series of maps showing average weather conditions in all parts of Korea month by month, the booklet presents maps dealing with surface wind conditions, mean temperature, and precipitation. Interpretive text material and statistical tables are included.

Relative completeness of the data, brevity, ready availability, and other factors suggest that this will be the climatic study most suitable for general use.

More detailed climatic information pertaining to Korea will be found in (13) Climatic Atlas of Japan and Her Neighboring Countries (text in English and Japanese). This large atlas presents over one hundred and fifty colored climatic maps covering Japan, Korea, Formosa, and parts of Manchuria. It summarizes the climate records for the period 1897-1925 and includes maps dealing with aspects of Korea's climate not covered by other available materials.

Item (58) Weather and Climate of Tsushima Island and the Surrounding Strait, is a study similar in scope to (68) cited above. It emphasizes southeastern Korea and the Tsushima strait area.

Map (191) Rainfall According to Locality, 1:5,000,000, clearly indicates the distribution of rainfall in relation to province (to) boundaries.

C. Geology

The most important geological map of Korea is a 1:50,000 series prepared by the Geological Survey of Chosen. The sheets of this set have been bound in

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folios and published with interpretive text material under the title (14) Geological Atlas of Chōsen. Most sheets carry complete texts in English and Japanese.

The colored geological information is overprinted on the same relief data used for (113) Korea, 1:50,000.

There are indications that 19 geological atlas folios have been published but only 15 of these were known to be in the United States in November 1947. The available folios cover many important mineral producing centers but their aggregate coverage amounts to only 10% of Korea's total area.

Various smaller scale, single sheet, geological maps covering all of Korea have been published. The best of these appear to be: (130) General Geological Map of Chōsen (Korea), 1:1,000,000, and (124) Geological Map of Chōsen Showing Distribution of Minerals, 1:1,000,000, both of which have texts in English and Japanese.

The geological information on map (130) is presented in almost identical form on: Geology, 1:1,000,000, page 74 in (6) Korea (Summary) Terrain Intelligence. For American users, availability, English text, and accompanying interpretive data will make this map more useful than the Japanese original (130).

Several publications of the Geological Survey of Korea, under the Government General of Chōsen, include useful geological maps. Outstanding among these are:

- (127) Bulletin of the Mineral Survey of Chōsen.
- (126) Mineral Resources of Chōsen (Korea).
- (128) Bulletin of the Geological Survey of Chōsen (Korea).

Most of the geological maps in the periodicals are scaled from 1:25,000 to 1:200,000. They cover environs of towns, mineral deposits, mine sites, and sometimes provinces. Texts are often in both English and Japanese.

For areas not covered by large scale geological maps, considerable geological information can be inferred from such topographical maps as (113) Korea, 1:50,000, or the Army Map Service reproduction (114) Korea, 1:50,000, AMS L751.

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In addition to their relief data, these large scale maps offer information on rock out-croppings, cliffs, crumbling banks, erosion, waterfalls, mineral springs, and other features bearing a close relation to geology.

Some information pertinent to Korea's surface geology will also be found on Map (112) Japanese Soil Map of Korea, 1:500,000, (Japanese text). This map has an advantage over similar maps in that it presents detailed soil data in relation to a fairly complete picture of terrain and cultural features.

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III. NATURAL RESOURCES

A. Vegetation

A very detailed system of vegetation symbols is used on (113) Korea, 1:50,000, and on the Army Map Service reproduction (114) Korea, 1:50,000, AMS L751. Although the vegetation data are not always easy to interpret, these two sets offer the most detailed information available on natural vegetation for a large portion of Korea.

Vegetation, 1:1,000,000, page 63 in (6) Korea (Summary) Terrain Intelligence appears to be the best single sheet vegetation map of Korea. It shows distribution of six main vegetation types on a fairly complete background of physical and cultural data; reliability is fair.

Map (35) Korea Vegetation and Terrain Regions, 1:1,900,000, covers all of Korea on a single sheet using distinctive colors to locate five main vegetation types. This desk size map gives a general picture of Korea's vegetation but it is not as complete as the 1:1,000,000 map noted above. Map (30) Korea Vegetation Regions, 1:4,200,000, which also covers all of Korea on a single sheet, locates boundaries for ten main vegetation regions each of which is described in the legend.

The following maps all deal with Korea's forests:

(125) Economic Map of Chosen, 1:1,500,000, (Japanese text).

Covers Korea on one sheet, presents a clear though highly generalized picture of the distribution of Korea's forests. Specific tree types are not identified.

(129) Map of Forest Distribution of Chosen, 1:500,000, (Japanese text).

For many years this was the basic forestry map of Korea.

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Though now rather out-of-date, it still presents considerable information of value. Tree types are identified, reforested areas are shown, and boundaries for various forest administrative areas are indicated.

(144) Forest Area Use - South Korea, 1:5,500,000.

A small-scale cartogram indicating forest acreage for each South Korean province. Forest area use (e.g. log production, erosion control, firewood, etc.) are indicated.

B. Soils

The most important soil map of Korea appears to be (112) Japanese Soil Map of Korea, 1:500,000, (Japanese text), which covers the whole country presenting detailed soil data on a background of farm lines and cultural information.

Soils: Engineering Properties, 1:1,000,000, page 66, in (6) Korea (Summary) Terrain Intelligence, classifies Korea's soils emphasizing characteristics important in engineering. The map is keyed to tables on adjoining pages which present soil profiles and other detailed information.

The 1:4,000,000 soil map in (10) Atlas of Japan, (Japanese text), covers all of Korea and provides an effective small-scale picture of the distribution of main soil types.

Map (196) Japanese Soils, 1:3,000,000, covers both Japan and Korea on a single sheet. Although it is on a slightly larger scale, this map is considerably less detailed than the 1:4,000,000 map cited above.

Country Trafficability, 1:1,000,000, page 29, in (6) Korea (Summary) Terrain Intelligence, classifies main soil types according to traffic carrying capacity. Soil data are presented on a background which includes contours, spot heights, roads, railroads and a good selection of place names.

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Map (37) Korea, Soil Trafficability Map, 1:2,100,000, is a specialized soil map emphasizing factors affecting the soil's capacity for carrying vehicles. Distribution of soil types is shown with shading. This map is handy and easy to use but it lacks background cultural data and is less detailed than the trafficability map cited above.

Some of the previously cited terrain and geological maps such as: (114) Korea, 1:50,000, AMS L751; (113) Korea, 1:50,000; and (130) General Geological Map of Chōsen, 1:1,000,000 offer data bearing an important relation to soils.

C. Minerals

There are numerous maps showing the distribution of ore deposits and mineral exploitation sites in Korea. Among the best are:

- (51) Map of Producing Mines in Korea, 1:1,000,000, (Japanese text).
- (124) Geologic Map of Chōsen Showing Distribution of Minerals, 1:1,000,000. (Japanese and abridged English texts).
- (130) General Geological Map of Chōsen, 1:1,000,000. (Japanese and abridged English texts).
- (125) Economic Map of Chōsen, 1:1,500,000, (Japanese text).

These four maps cover all of Korea and present mineral information in relation to fairly complete patterns of cultural data, to (province) boundaries, place names, transportation features, etc.

Number (51) locates deposits, identifies the exploited mineral, and uses graphic circle devices to indicate the volume of production at prominent sites.

Maps (124) and (130) locate mines, identifying the exploited mineral, on a background of geological data. No information is given on the relative importance of the various mineral localities.

Map (125) locates numerous mine sites (exploited mineral identified) and provides a particularly clear picture of the distribution of coal fields. This map has the advantage of presenting mineral data in relation to other economic information (forests, fishing, agriculture, transportation).

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Coal, 1:2,000,000, page 80, in (6) Korea (Summary) Terrain Intelligence, deals only with coal deposits. Anthracite and lignite are differentiated but producing and potentially productive areas are not.

Item (193) Mineral Resources of Southern Korea offers useful mineral information for the area south of the 38th parallel. Extensive descriptive data and statistics are accompanied by a series of outline maps on which main deposits are shown. Although the locational information is not detailed, this study is still important for its recent data on volume of production.

Sources of Construction Materials, 1:1,000,000, page 71, in (6) Korea (Summary) Terrain Intelligence, locates areas where sand, gravel, and quarriable rock are available.

Item (14) Geological Atlas of Chosen, includes considerable data on ore deposits, mineral producing regions, and mine sites. Some of this information will be found on the colored, 1:50,000 geological sheets. Other mineral maps associated with the interpretive text include geological profiles, maps of mineral producing regions and plans showing shaft layouts of individual mines. In many instances the text is in both English and Japanese.

Various periodicals published during the last thirty years by the Geological Survey of Korea include many excellent maps dealing with minerals. The titles of these publications are as follows:

(127) Bulletin of the Mineral Survey of Chosen.

(126) Mineral Resources of Chosen (Korea).

(128) Bulletin of the Geological Survey of Chosen.

Many of the maps (1:10,000 to 1:200,000) in these journals, cover important mineral producing areas. Some show installations connected with the exploitation of minerals and many present related geological information. Most map texts are in

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Map (37) Korea, Soil Trafficability Map, 1:2,100,000, is a specialized soil map emphasizing factors affecting the soil's capacity for carrying vehicles. Distribution of soil types is shown with shading. This map is handy and easy to use but it lacks background cultural data and is less detailed than the trafficability map cited above.

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Coal, 1:2,000,000, page 80, in (6) Korea (Summary) Terrain Intelligence, deals only with coal deposits. Anthracite and lignite are differentiated but producing and potentially productive areas are not.

Item (193) Mineral Resources of Southern Korea offers useful mineral information for the area south of the 38th parallel. Extensive descriptive data and statistics are accompanied by a series of outline maps on which main deposits are shown. Although the locational information is not detailed, this study is still important for its recent data on volume of production.

Sources of Construction Materials, 1:1,000,000, page 71, in (6) Korea (Summary) Terrain Intelligence, locates areas where sand, gravel, and quarriable rock are available.

Item (14) Geological Atlas of Chosen, includes considerable data on ore deposits, mineral producing regions, and mine sites. Some of this information will be found on the colored, 1:50,000 geological sheets. Other mineral maps associated with the interpretive text include geological profiles, maps of mineral producing regions and plans showing shaft layouts of individual mines. In many instances the text is in both English and Japanese.

Various periodicals published during the last thirty years by the Geological Survey of Korea include many excellent maps dealing with minerals. The titles of these publications are as follows:

(127) Bulletin of the Mineral Survey of Chōsen.

(126) Mineral Resources of Chōsen (Korea).

(128) Bulletin of the Geological Survey of Chōsen.

Many of the maps (1:10,000 to 1:200,000) in these journals, cover important mineral producing areas. Some show installations connected with the exploitation of minerals and many present related geological information. Most map texts are in

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both English and Japanese.

Several readily available U.S. published maps, compiled during World War II, offer mineral information in connection with data on related industries. The five maps listed below (each covering all of Korea) are of this type.

(64) Korea, Non-Ferrous Metals and Non-Metallic Minerals, 1:2,000,000.

Locates mines, identifying the exploited mineral.

Some mine locations are approximate.

(66) Korea: Primary Centers of Industry, Power, and Mines, 1:3,000,000.

Locates mine sites for ten main minerals.

(61) Korea, Iron and Steel Industry, 1:3,800,000.

Locates iron and ferro alloy ore mines.

(62) Korea, Coal and Petroleum, 1:3,800,000.

Symbols indicate approximate locations of major coal fields. Figures near symbols show the number of mines in each field.

(197) Important Mines, Oil, and Metallurgical Plants of Korea, (Chosen), 1:1,625,000.

Locates numerous mines and deposits, identifies the exploited mineral, provides data on about 25 different minerals.

The three small-scale maps noted below cover Korea south of the 38th parallel. They originally appeared in various issues of the Summation of United States Army Military Government Activities in Korea. Although the maps are not detailed, they present mineral production information based on 1946 figures.

(140) Output of Operating Metal Mines and Smelters, 1:8,000,000.

Locates mineral producing areas and indicates volume of production.

(158) Principal Salt Producing Areas, 1:9,000,000.

Provides a sketchy picture of the distribution of main salt producing areas.

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(169) Coal Mining -- South Korea, 1:9,000,000.

Locates coal mining areas and indicates volume of production.

Mines are located by symbol on various topographical set maps such as (113) Korea, 1:50,000, (114) Korea, 1:50,000, AMS L751, (123) Korea, 1:250,000, AMS L551, and (32) Eastern Asia, 1:1,000,000.

D. Water Supply

Some of the best available maps offering data pertinent to Korea's water supply appear in (41) Water Supply and Sewerage of Korea, Strategic Engineering Study No. 155. This work includes a general water supply map covering all of Korea and six city plans showing details for the more important city water systems. The accompanying text, tables, and statistical material aid in interpreting the maps.

Aside from their information on water supply installations, the city plans in this study offer nothing that is not covered better on the plans cited in Section IX, CITY PLANS.

Map (42) Korea Water Supply and Sewerage Systems, 1:2,000,000, is similar in scope to the general water supply map appearing in the above mentioned engineering study, item (41). It is on a larger scale and presents more information on springs, dams, and drainage but does not provide as much technical data on individual city water systems.

Item (6) Korea (Summary) Terrain Intelligence, includes two useful water supply maps. The most important of these (Water Supply, 1:1,000,000, page 48) classifies Korea's terrain according to the natural availability of water. An adjoining table explains the classifications used on the map. The other map (Water Supply: Municipal Systems and Sewage Disposal, 1:1,500,000, page 50) is a simple outline map on which underlining of names indicates the type of data available

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(in the adjoining text) on each city water system. The tables to which the map is keyed are quite detailed and they include estimates as to the reliability of the water supply data.

The medium scale topographical sheet, map (123) Korea, 1:250,000, AMS L551, effectively portrays important dams and reservoirs.

Springs, wells, dams, and other water supply features are identified with varying clarity on the sheets of (114) Korea, 1:50,000, AMS L751 and (113) Korea, 1:50,000.

Map (43) Kyōngsōng (Seoul, Keijo) and Inch'ōn (Chemulpo, Jinsen) Water Supply Sketch Map, 1:47,000, provides an effective analysis of the water supply system serving the cities of Kyōngsōng (Seoul) and Inch'ōn.

Various maps offering pertinent data on ground water and mineral springs are to be found in the periodicals: (127) Bulletin of the Mineral Survey of Chōsen, and (128) Bulletin of the Geological Survey of Chōsen (Korea).

A. Industry

The available maps presenting data on Korea's industries are numerous and varied. Differences in coverage patterns, scope, reliability, and other factors make it desirable to divide this section into two major parts.

The first part provides a listing of general economic maps that show several types of industrial activity. The second part presents a listing of map titles by commodity along with brief descriptive and analytical comments. If a particular map provides data on more than one commodity, its listing is repeated wherever it seems justified. A few of the more general maps noted in the first part are repeated under the commodity headings. Unless otherwise noted, each map covers all of Korea.

1. Maps Presenting Data on Numerous Industries

(197) Important Mines, Oil, and Metallurgical Plants of Korea (Chosen),
1:1,625,000.

Provides fairly reliable data on the distribution of main refineries, smelters, and petroleum processing plants.

(66) Korea: Primary Centers of Industry, Power, and Mines, 1:3,000,000.

Presents a fairly well-rounded view of Korea's industry. Important plants are located with picture symbols.

(47) Korea, Industrial Concentrations, 1:4,000,000.

Provides a breakdown of major industrial concentrations. Distinctive coloring applied by province indicates degree of industrialization.

2. Industry Maps Listed by Commodity

a. Iron and Steel

(194) Korea, Iron and Steel Industry, 1:8,000,000.

Based on 1946 data; apparently the most recent iron and steel map available. Rather crude and sketchy; should be studied in connection with accompanying text material.

(140) Output of Operating Metal Mines and Smelters, 1:8,000,000.

Covers South Korea only, shows distribution of iron and steel production (quantitative) for most of 1946.

(61) Korea, Iron and Steel Industry, 1:3,800,000.

The best U.S.-published iron and steel map based on wartime data.

Available in quantity, and suitable for general use even though the data on "integration" of plants is not too clear. Includes information on ferro-alloy ore mines.

(197) Important Mines, Oil, and Metallurgical Plants of Korea (Chōsen), 1:1,625,000.

Presents reasonably accurate iron and steel data in relation to information on other mineral producing and processing centers.

b. Non-Ferrous Metals

(197) Important Mines, Oil, and Metallurgical Plants of Korea (Chōsen), 1:1,625,000.

Based on wartime data but quite complete and reliable for locating main processing centers.

(64) Korea, Non-Ferrous Metals and Non-Metallic Minerals, 1:2,000,000.

Based on wartime data location of many plants is approximate.

Confined strictly to non-ferrous metals, not as complete or reliable as the map noted above.

(66) Korea: Primary Centers of Industry, Power, and Mines, 1:3,000,000.

Presents data on non-ferrous metal processing centers along with other industrial activity.

(47) Korea Industrial Concentration, 1:4,000,000.

A more generalized treatment of data covered by the preceding map (66).

c. Petroleum

(62) Korea, Coal and Petroleum, 1:3,800,000.

Based on wartime data, symbols locate petroleum refineries and synthetic oil plants.

(197) Important Mines, Oil, and Metallurgical Plants of Korea (Chosen), 1:1,625,000.

Locates main petroleum refineries.

(53) Minor Oil Facilities of Korea, (With Related Transportation), 1:3,900,000.

Symbols locate packaged oil warehouses and depots.

(57) Breakdown of the Standard Vacuum Oil Co. in Japan and Korea, various scales.

Contains a series of 60 city plans, sketches, and diagrams showing Standard Vacuum properties and installations in Korea. Precise property dimensions are given.

d. Construction Materials Including Lumber

(63) Korea, Plants Producing Construction Materials, 1:3,800,000.

Based on wartime data, symbols locate plants producing cement, structural steel, brick, tile, building stone and other materials.

(168) Lumber Production, 1:4,500,000.

Based on 1942 data, shows lumber production (quantitative) by province. Ten types of lumber identified.

(167) Sawmills, 1:4,500,000.

Covers South Korea only, shows distribution of sawmills as of Sept. 1946.

6. Electric Power

(198) Electric Power of Korea (Strategic Engineering Study).

Includes various maps locating main power stations and lines, classifies stations as to power output. Accompanying text, tables, and statistics deal with all phases of Korea's power supply.

(54) Korea, Distribution of Electric Power Plants, 1:2,000,000.

An effective single sheet map locating and classifying Korea's power installations. Thermolectric and hydroelectric plants are differentiated by color.

(125) Economic Map of Chōsen, 1:1,500,000 (Japanese text).

Includes 1:3,000,000 inset showing distribution of developed power sites. Varied symbols indicate each site's actual or estimated capacity in kilowatts.

(66) Korea: Primary Centers of Industry, Power, and Mines, 1:3,000,000.

Locates main power lines and plants. Brings out relationships between electric power and other industries. Shows operating and incomplete power dams.

(44) Fusen-Chōshin Power Development, 1:120,000.

A detailed, single sheet topographic map showing the many important power installations north of Hungnam (Konan).

(67) Choshin-Fusen Hydraulic Power Plants and Konan Nitrogen Fertilizer Plant in Korea, n.e.

A diagrammatic perspective map showing the Changjin and Fusen power stations, their transmission lines, and the main industrial plants in Hungnam which they supply.

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(65) Suiho Dam and Environs (Yalu River), 1:25,000.

A large-scale plan covering the Suiho dam and adjacent installations.

f. Fertilizer

(59) Commercial Fertilizer Plants in Korea, 1:4,000,000.

Based on 1946 data, locates fertilizer plants throughout Korea.

Plants producing phosphatic, nitrogenous, and organic fertilizers are differentiated.

(67) Choshin-Fusan Hydraulic Power Plants and Konan Nitrogen Fertilizer Plant in Korea, n.e.

Locates many of the nitrogen fertilizer plants in the Hungnam (Konan) area.

g. Aircraft and Motor Vehicles

(50) Korea, Aircraft, Motor Vehicles and Munitions Plants, 1:3,900,000.

Based on wartime data, not entirely accurate but still the best readily available map of its type.

(47) Korea Industrial Concentration 1944, 1:4,000,000.

Locates aircraft and motor vehicle plants.

(66) Korea: Primary Centers of Industry, Power, and Mines, 1:3,000,000.

A common symbol locates aircraft and "transport" manufacturing centers.

h. Chemicals and Munitions

(46) Korea, Major Chemical Plants, 1:3,500,000.

Locates 28 major chemical plants identifying the chemicals produced or processed.

(66) Korea: Primary Centers of Industry, Power, and Mines,
1:3,000,000.

A common symbol is used to locate plants producing chemicals and munitions.

(67) Choshin-Fusen Hydraulic Power Plants and Konan Nitrogen Fertilizer Plant in Korea, n.s.

Covers Hungnam city and environs. Locates various important chemical plants in this area.

i. Ships and Machinery

(50) Korea, Aircraft, Motor Vehicles, and Munitions Plants,
1:3,900,000.

Locates ten munitions plants by symbol. Map based on wartime data; no information is given on the relative importance of the various installations.

(48) Korea, Machinery and Railway Equipment Manufacturing Centers and Shipyards, 1:3,800,000.

Locates two classes of shipyards (1940 data).

(47) Korea Industrial Concentration 1944, 1:4,000,000.

Provides a highly generalized picture of the distribution of industrial plants producing ships, machinery.

j. Textiles Including Silk

(66) Korea: Primary Centers of Industry, Power and Mines,
1:3,000,000.

Symbols locate eight textile production centers.

(145) Cotton Factories in South Korea, 1:4,000,000.

Covers South Korea locating cotton factories by symbols.

The size of the symbol is proportional to the amount of ginned cotton processed annually.

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(180) Distribution of Cocoons Produced, 1:10,000,000.

Dots show distribution of cocoon production. Graphic circles indicate number of selected silkworms in each province.

k. Firewood and Charcoal

(166) Charcoal and Firewood Productions, 1:9,000,000.

Covers South Korea showing distribution of estimated charcoal and firewood production for 1946.

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Additional information on major industrial plants, as well as data on small local industries, will be found on various plans listed under the names of cities in Section IX, CITY PLANS.

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B. Trade and Finance

The main patterns of Korea's wartime and prewar trade, which was closely integrated with Japan's economy, are illustrated on various small-scale maps. Prominent among these is page 63 in (11) New Map Collection (Japanese text), which shows prewar trade routes and volume of traffic between Japanese and Korean ports. A map indicating the principal products imported and exported from Korean ports appears on the same page.

Item (12) Kleiner Atlas von Japan (German text) contains a map, number 35, portraying the volume of traffic along Korean land and sea routes.

Map (39) The Japanese Shipping Position for 1942, 1:23,000,000, covers East Asia showing, among other relationships, Korea's position in Japan's wartime trade.

Also pertinent to Korea's trade and finance are several small-scale maps dealing with price indexes and postal savings. These cover only the American occupation zone south of the 38th parallel. The maps are listed below with brief comments.

(174) Provincial Retail Price Indexes, 1:9,000,000.

A series of six maps, each dealing with a different commodity, showing rural retail prices as of Sept. 1946.

(172) Urban Retail Price Indexes, 1:9,000,000.

Same as (174) for urban areas.

(170) Monthly Per Capita Food Costs, 1:9,000,000.

Two companion maps indicate per capita food costs by province and per capita food costs in five main cities.

(160) Postal Savings, 1:6,000,000.

Shows Postal Savings deposits and withdrawals for early 1946.

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The organization of the government monopoly bureau (which controls the production and distribution of salt, tobacco, ginseng, and opium) is shown on map (151) Monopoly Bureau Organization, 1:9,000,000.

C. Agriculture and Food Supply

This section is divided into three parts. The first part lists maps pertaining to the food supply situation. The second part discusses maps dealing with agriculture generally, while the third part lists specialized maps under the names of crops. Unless otherwise noted, each map has an English text and covers all of Korea.

1. Food Supply

(163) Summer Grain Production Per Capita, 1:9,000,000.

Covers only South Korea showing 1946 summer grain production in relation to the South Korea average. Also provides data on grain surpluses and deficits.

(171) Government Controlled Staple Food Stocks, 1:9,000,000.

Covers only South Korea showing the distribution of staple food stocks as of October 1946.

(28) Surpluses and Deficits of Staple Food Production, 1:3,800,000.

A complicated quantitative distribution map designed to bring out relationships between areas with adequate and inadequate food supplies.

2. General Agriculture

Maps (40) Land Utilization in Japan, 1:3,700,000, and (34) Korea.

Agricultural Production and Communications, 1:4,300,000, show agriculture in relation to natural vegetation. Map (143) Arable Lands - South Korea, 1:6,000,000,

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covers only South Korea presenting generalized data on the distribution and ownership of arable land.

Very detailed information on the agriculture of various regions is given on the sheets of (114) Korea, 1:30,000, AMS L751 and (113) Korea, 1:50,000 (Japanese text). On these sets, rice cultivation (irrigated, dry), orchards, and cultivated marshes are located. Mulberry and tea growing areas are also shown.

(125) Economic Map of Chōsen, 1:1,500,000 (Japanese text).

Roughly locates production centers for a number of main crops. This map has the advantage of presenting general agricultural information in relation to other important economic features such as forests, mines, and fishing.

(131) A Study of Chinese Emigrants Settled in Korea on Fire Farms.

Includes an effective 1:8,000,000 map showing the distribution of arable land by distinctive colors.

3. Specialized Crops

Unless otherwise noted in the comments following the title, each map listed under this heading is a dot distribution map covering all of Korea. All map texts are in English.

a. Rice

(116) Rice (irrigated), 1:12,500,000.

(176) Distribution of [Rice] Paddy Fields, 1:10,000,000.

(165) Rice Production Per Capita-Provinces, 1:9,000,000.

Covers only South Korea using pie graphs to show late 1946 rice production in relation to the South Korea average.

(146) Rice Collection Program, South Korea 1 Dec. 1946 to Aug. 1947, 1:9,000,000.

Covers only South Korea indicating prospective surpluses and deficits

in rice production.

b. Wheat

(122) Wheat, 1:12,500,000.

(175) Distribution of Cultivation of Wheat, 1:10,000,000.

c. Millet

(120) Millet, 1:12,500,000.

(178) Distribution of Cultivation of Italian Millet, 1:10,000,000.

d. Barley and Rye

(177) Distribution of Cultivation of Barley and Rye, 1:10,000,000.

(121) Barley, 1:12,500,000.

e. Soy Beans

(118) Soy Beans, 1:12,500,000.

(181) Distribution of Cultivation of Soy Beans, 1:10,000,000.

f. Fruit

(186) Distribution of Grapes Growing, 1:10,000,000.

(185) Distribution of Pear Growing, 1:10,000,000.

(183) Distribution of Apple Growing, 1:10,000,000.

g. Tobacco

(69) Tobacco Map of Japan, 1:1,500,000.

Color locates cultivation zones for major tobacco varieties and sub types.

(159) Principal Tobacco Producing Areas, 1:9,000,000.

Covers only South Korea. Locates tobacco growing areas and identifies a few main varieties.

h. Miscellaneous Crops

(117) Mulberry Tree, 1:12,500,000.

- (179) Distribution of Cultivation of Cotton, 1:10,000,000.
- (182) Distribution of Cultivation of Hemp, 1:10,000,000.
- (187) Distribution of Cultivation of Potatoes, 1:10,000,000.
- (119) Radishes, 1:12,500,000.
- (157) Principal Ginseng Producing Areas, 1:9,000,000.

D. Animal Husbandry

There are a few small-scale maps showing the distribution of farm animals in Korea. Among the best of these are:

- (184) Distribution of Farmyard Fowls, 1:10,000,000.
- (188) Distribution of Horses, Donkeys, Mules, Goats, Sheep, 1:10,000,000.
- (189) Distribution of Pigs, 1:10,000,000.
- (190) Distribution of Cattle (Oxen), 1:10,000,000.

These are English text dot maps covering all of Korea.

A small scale map on page 29 in (12) Kleiner Atlas von Japan (German text) also shows the distribution of farm animals in Korea.

E. Fishing

In the following tabulation, maps providing data on Korea's fisheries are divided into two groups. The first group includes maps dealing with general relationships such as areas where certain fish are caught, number and type of boats, number of workers, processing plants, restricted fishing areas, etc. In the second group are statistical maps providing data on the volume of production. All of the maps except three have English texts and each map covers all of Korea unless otherwise noted.

1. General

- (205) Japanese Fisheries Map, 1:3,000,000 (Japanese text).

A carefully prepared wall map covering Japan, Korea, and adjacent

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seas. Identifies types of fish caught, main fishing areas, important processing installations, and provides data on volume of catch.

(149) Fisheries, 1:9,000,000.

An excellent series of small-scale maps showing restricted fishing areas, government control stations, associations and guilds, as well as various types of plants connected with the fishing industry. Some of the maps cover all of Korea while others are confined to South Korea.

(156) Principal Fishing Areas and Fishing Ports, Korea, 1:4,500,000.

Locates fishing ports and principal fishing areas. Shows areas planted with codfish eggs in 1946.

(164) Fisheries Workers and Fleet, 1:9,000,000.

Covers only South Korea, giving data on number of fishing workers, tonnage of boats, types of boats, etc.

(11) New Map Collection.

Map 2, page 62, 1:6,000,000 locates fishing areas and identifies types of fish caught. (Japanese text).

(125) Economic Map of Chōsen, 1:1,500,000 (Japanese text).

Symbols printed around Korea's coasts identify areas where certain types of fish (cod, salmon, whitefish, red snapper, etc.) are caught.

2. Volume of Production (The three maps listed in this group cover South Korea only.)

(162) Processed Marine Products, 1:9,000,000.

Production of processed marine products is indicated with pie graphs and figures in provinces.

(147) Fisheries Production, 1:9,000,000.

Shows volume of the fish catch in metric tons and the value in yen.

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(161) Fish Catch - South Korea, 1:9,000,000.

Indicates volume of the fish catch - July 1946.

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V. TRANSPORTATION

A. Roads

The three most important maps offering information on the roads of Korea appear to be (123) Korea, 1:250,000, AMS L551 (AMS 2), a set map suitable for use in the field as an operational road guide; (5) Japan Road Map, 1:1,000,000, Korea sheet, suitable for route planning and limited field use; (1) Korea Roads and Railroads, 1:2,000,000, appropriate for desk use and route planning but not suitable for use in the field.

Maps (123) and (5) provide complete coverage except for a few small areas in the extreme northeast. Map (1) covers the whole country. All three have English texts.

Numerous other maps and reference materials present specialized aspects of Korea's road net. The best are noted below along with brief descriptions and evaluative comments.

(32) Eastern Asia, 1:1,000,000.

A small-scale topographic set presenting fairly detailed road data.

By bringing in adjacent sheets, the coverages can be extended to illustrate Korea's road connections with Manchuria and the USSR.

(110) Highways of Korea.

A map-illustrated Strategic Engineering Study noteworthy for its detailed data on road width, construction materials, traffic capacity, bridges, etc.

(139) Highways - South Korea, Sept. 1946, 1:4,300,000.

A sketchy road map covering South Korea only. It shows existing roads and roads under construction as of September 1946.

(6) Korea (Summary) Terrain Intelligence.

This study includes three maps which present supplementary road data of considerable value. Road Construction and Maintenance, 1:1,000,000, page 62, classifies Korea's land surface according to the prevalence of conditions which favor or retard road building; Rivers, 1:1,000,000, page 32, emphasizes river crossings (bridges, ferries, fords) while Cross-Country Trafficability, 1:1,000,000, page 29, classifies Korea's soils according to their capacity for carrying vehicular and pedestrian traffic.

(37) Korea, Soil Trafficability Map, 1:2,100,000.

Presents data on the soil's capacity for carrying vehicles under varying climatic conditions. Although it is simpler and easier to use, this map is not as detailed and complete as the cross-country trafficability map cited above.

(36) Korea, Slope, Terrain Regions and Routes, 1:1,900,000.

Presents detailed data on the angle of slope; brings out relationships between roads and terrain.

(45) Highways in Korea, 1:3,000,000.

A small outline map showing Korea's main road net. It is suitable for illustrating reports and plotting data related to roads.

(8) Dai Nippon Fu-, Ken-Betsu Chizu Narabi Chimei Daiken, (Atlas of Japan, Maps of Cities and Prefectures with Gazetteer).

Includes a 1:2,000,000 transportation map providing information on distances between named places.

Information on roads in and around urban areas will be found on the various plans listed under the names of cities in Section IX, CITY PLANS.

B. Railroads

Korea's railroad net was modified considerably during the war. Most available maps showing railways do not present an entirely accurate picture. For many sections of track only approximate alignment data are now available.

In the following tabulation, various maps showing railroads have been noted along with brief descriptive and evaluative comments. The first five maps appear to be most important. The order in which they are listed has little significance for each is useful in a particular way.

(123) Korea, 1:250,000, AMS L551, (AMS 2).

Covers all of Korea, locates 4'8 1/2" gauge and narrow gauge railways (single track, double track). In general, this series offers the most detailed data available on track alignment; although in areas for which air photo coverage or other reliable sources were unavailable, track alignment is sometimes approximate. Where this is true "approximate alignment" appears on the map. Tunnels and bridges are located.

(7) Railroads of Korea, 1:2,500,000.

Covers all of Korea and is devoted solely to railroad data. Presents detailed classification and precise gauge figures. Distinguishes single from multiple track, identifies bridges, shops, yards, and other features.

(1) Korea Roads and Railroads, 1:2,000,000.

Presents a clear, small-scale portrayal of Korea's railroads.

Locates railroad facilities and provides data on multiple track, gauges, and tunnels.

(32) Eastern Asia, 1:1,000,000, AMS 5301.

A small-scale topographic set providing complete coverage for Korea on six sheets. Railroad data varies from sheet to sheet but most sheets show whether lines are double or single, track and broad or narrow gauge--alignment is sometimes approximate. By bringing in adjacent sheets, the coverage can be extended to illustrate Korea's railroad connections with Manchuria and the USSR.

(5) Japan Road Map, 1:1,000,000.

The Korea sheet of this series covers nearly all of Korea except a small area in the extreme northeast. Railroad alignment is shown in more detail and in relation to a more complete cultural background than on map (1). Gauges are identified but no information is given on facilities, multiple tracks, or tunnels.

(36) Korea, Slope, Terrain Regions and Routes, 1:1,900,000.

Presents detailed data on the angle of slope and brings out relationships between railroad right-of-ways and terrain.

(133) Pilotage Charts, 1:500,000.

(134) Aeronautical Approach Charts, 1:250,000.

For certain areas, these larger scale aeronautical charts present a very effective portrayal of railway tunnels and bridges.

Large scale pictures of railway facilities (terminals, yards, shops, etc.) in urban areas are offered by various plans listed under the names of cities in Section IX, CITY PLANS.

C. Ocean Waterways

The charts prepared by the Japanese Navy, (200) Japanese Hydrographic Charts, are the prime source for information on the ports, coasts, and coastal

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waterways of Korea. The Japanese have published over 70 charts which provide complete coverage for Korea at various scales. Texts are usually both English and Japanese.

Charts published in the United States, (199) United States Hydrographic Chart, are important to American users because of their ready availability. These charts were compiled largely from Japanese charts and cover Korea completely although, for some areas, the Japanese charts provide coverage at a larger scale.

Item (24) Sailing Directions for Siberia and Chosen, presents detailed navigation instructions for Korea's coasts and offshore islands. The description of ports, landing places, islands and other features make this volume very useful in interpreting hydrographic charts and other map materials offering data on Korea's coastal areas.

Map (201) Korea, Ports, Landings, and Anchorage, 1:2,100,000, covers all of Korea using loading capacity as a criterion for a rather detailed classification of ports.

D. Inland Waterways

The two most important maps dealing with Korea's inland waterways appear to be: Diagrammatic Map, Waterways of Korea, 1:1,500,000; a simple diagrammatic sketch showing navigability for three types of vessels; and a companion map, Waterways of Korea, 1:1,500,000, which shows the stream detail omitted on the diagrammatic map. Both appear in (138) Waterways of Korea Strategic Engineering Study, #158. This work also includes text, tables, pictures, diagrams, plans, and other data helpful in interpreting the hydrography patterns shown on various maps.

Additional material on inland waterways will be found in (6) Korea (Summary) Terrain Intelligence, which contains a useful map (Rivers, 1:1,000,000, page 32)

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emphasizing stream crossings (bridges, ferries, fords) while also showing navigability.

E. Air Navigation

Korea is completely covered by relatively recent American Air Forces Aeronautical charts scaled at 1:1,000,000, and 1:500,000. USAF Aeronautical approach charts scaled at 1:250,000 provide nearly complete coverage.

Although these charts are not as complete and reliable as charts at similar scales covering the United States, they are still the most important air navigation guides for Korea.

The small-scale charts, (132) World Aeronautical Charts, 1:1,000,000, present a fairly complete assortment of air navigation information on a generalized background of physical and cultural data. These charts were intended for use in route planning and for air navigation on longer flights.

The 1:500,000 charts, (133) Pilotage Charts, are intermediate in detail between the 1:1,000,000 charts and the aeronautical approach charts scaled at 1:250,000.

The large-scale charts, (134) Aeronautical Approach Charts, 1:250,000, were intended primarily as guides to be used in approaching landing fields. The physical and cultural data have been selected and generalized for this special purpose.

Various sheets of (123) Korea, 1:250,000, AMS L551 (AMS 2) provide an excellent portrayal of airfields and surrounding cultural features. Most airfields are named and the alignment of some runways is shown.

Suitability for Airfields, 1:1,000,000, after page 54 in (6) Korea (Summary) Terrain Intelligence, locates and classifies selected areas as to their suitability for airfield construction.

VI. COMMUNICATIONS

A. Telegraph

For general use, map (29) Telecommunications, 1:2,000,000, a desk size map covering all of Korea, offers the most complete and reliable information on Korea's telegraph system. Stations and lines are located and relationships between these and other telecommunications features are shown.

Item (111) Communications Map (Chosen), 1:1,200,000 (Japanese text), is a useful telecommunications and postal map published by the Superintendent of Communications of the Government General of Chosen. Although this map is dated 1933, it is still significant for its detailed classification of telegraph offices, exchanges, and administrative centers. It includes insets for Kyōngsōng and Pusan.

The 1:2,000,000 map on page 51 in (8) Dai Nippon Fu-KeKen-Betsu Chizu Narabi Chimei Daikan, (Atlas of Japan, Maps of Cities and Prefectures with Gazetteer) - Japanese text - clearly locates main telegraph stations. The legends of (114) Korea, 1:50,000, AMS L751 and (113) Korea, 1:50,000, provide symbols for three classes of telegraph offices but these are often difficult to identify on the maps.

Where telegraph information is needed for urban areas, city plans are often the best available source. Many of the plans listed in Section IX, CITY PLANS, include data on telegraph offices and related features.

B. Telephone

Item (111) Communications Map (Chosen), 1:1,200,000 (Japanese text), locates long distance telephone lines and various classes of telephone offices, exchanges, and administrative centers. Although dated 1933, this map still presents a rather effective outline of Korea's telephone system.

The best readily available English text map showing Korea's telephone system appears to be (29) Telecommunications, 1:2,000,000, which provides reasonably reliable telephone information for all of Korea. Telephone repeater stations are located but telephone lines are not always differentiated from telegraph.

Map (150) Telephone Control Offices, 1:5,000,000, covers all of Korea showing the distribution of telephone subscribers.

The legends of (114) Korea, 1:50,000, AMS L751 and (113) Korea, 1:50,000, provide a symbol for telephone offices but this is often difficult to identify on the sheets of these sets.

Many of the maps listed under Section IX, CITY PLANS, include data on telephone offices and associated features in major cities and larger towns.

C. Submarine Cables

Although it is based on data assembled during the war, map (29) Telecommunications, 1:2,000,000, presents fairly reliable data on the main submarine cables connecting Japan and Korea. Telegraph cables are differentiated from telephone cables.

Map (23) Map of Japan and Adjacent Regions, 1:2,000,000, covers Korea, Japan, Manchuria, China and nearby areas of the USSR providing an effective portrayal of the cable network connecting these areas. The alignment of the main cables between Korea and Japan is shown in greater detail on this map than on map (29) cited above; but the various types of cables are not differentiated.

Pusan (Fusan) is a vital focal point for submarine cables serving Korea. Various United States Hydrographic Office charts -- see (199) United States Hydrographic Charts -- present a clear picture of the alignment and shore connections of submarine cables terminating at this important port.

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Several Japanese charts -- see (200) Japanese Hydrographic Charts -- also include useful data on submarine cables.

D. Radio

Radio broadcasting stations south of the 38th parallel are clearly located on map (154) Korean Broadcasting Corporation, 1:6,000,000. This map gives each station's call letters and indicates its normal reception area.

Map (29) Telecommunications appears to be the only available map presenting a reasonably complete, single sheet, picture of radio transmission facilities for all of Korea. It locates broadcasting stations (giving call letters, if known) radio direction finders, radiotelegraph stations, and other types of radio installations. This map is based on data assembled during the war and its portrayal of Korea's radio facilities is not entirely up-to-date and reliable.

Item (132) World Aeronautical Charts, 1:1,000,000, provides data on radio facilities associated with air navigation.

E. Postal Service

The best available postal map (111) Communications Map (Chosen), 1:1,200,000 (Japanese text), locates various types of offices, administrative centers, relay points, delivery routes, and exchange points. Distances between stations are given and the types and frequency of service are indicated in many cases. Although Korea's postal system has been altered by the division of the country, it seems probable that the general outline presented on this map is still valid.

Different classes of postal stations and administrative centers are located with varying clarity on the sheets of maps (113) Korea, 1:50,000, and (114) Korea, 1:50,000, AMS L751.

Information on postal facilities in urban areas will be found on a great many of the plans listed under the names of cities in Section IX, CITY PLANS.

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VII. PEOPLE

A. Distribution

Nearly all of the available maps showing the distribution of population in Korea are based on statistical data assembled in the 1930's. These maps do not adequately record the population movements resulting from the Japanese war effort.

Recent developments such as the repatriation of Japanese and the return of Koreans formerly residing abroad are partially reported on various graphs and statistical charts appearing in the monthly "Summation of United States Army Military Government Activities in Korea"; however, these very recent trends have not yet been adequately mapped.

Only one of the maps (49) noted in the following tabulation is readily available and it has many inadequacies. Items (10) and (115) though carefully drafted, present a somewhat out-of-date picture. Map (19) is a sketchy, small-scale map giving the main outline of recent trends on the population movement.

(49) Distribution of Population in Korea, 1:2,250,000.

The portrayal of population distribution is crude and sketchy. The map is included in this listing because it appears to be the only population map of Korea for which distribution copies are readily available. The population data are based on statistics of 1938.

(10) Atlas of Japan (Japanese text).

Page 43-44, 1:10,000,000, provides two pictures of the distribution of population in the Japanese Empire.

(a) On a dot distribution map. (b) With distinctive coloring on a map showing internal political divisions. Though the scale is small, both portrayals are effective. Having them on a single page

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facilitates comparison. Map 3, 1:7,000,000, on page 37 shows the distribution of population by dots. This map covers only Korea.

(115) Population, 1:12,500,000.

Distribution of rural population (1932 statistics) is shown by dots. The number of inhabitants in each urban area is indicated by pie graphs proportional in size to the city's population.

(19) Percent of Population Change, 1:10,000,000.

Distinctive shading provides a highly generalized picture of the percentage of the population increase 1935-41. Based on population figures for the late 1930's and fragmentary statistical data for the period since 1940.

B. Religion

Confucianism, Buddhism, and Christianity are the major faith in Korea. In addition, shamanism, and a native cult, Chondokyo, have adherents. Followers of these faiths are scattered throughout the country and no religion is identified with any particular area.

Most of the few specialized maps dealing with religion in Korea show the distribution of Christian mission stations and the division of Korea into missionary zones agreed upon by various Christian churches.

Among maps of this type, map (60) Korea Mission, 1:300,000, which covers southwestern Korea, appears to be the most detailed. It locates various types of mission stations and identified places where Christian services are held. An inset shows the division of Korea into Presbyterian and Methodist missionary spheres.

Map (203) Japan, Korea, and Formosa, Showing Protestant Mission Stations, 1:2,700,000, is a simple outline map with place names keyed to an

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index identifying the missions at each named locality. The name of the church and nationality of the sponsoring group are indicated. Item (31) Map of Korean Missions, 1:3,000,000, illustrates the division of Korea into missionary zones recognized by various churches.

Map (202) Important Cultural Sites, 1:5,000,000, locates a few prominent Buddhist temples. Churches, shrines, and temples are located by symbol with varying clarity on such large-scale topographical sets as (113) Korea, 1:50,000, and (114) Korea, 1:50,000, AMS L751.

Information on churches, mission hospitals, mission schools, temples, and other religious edifices in particular localities, will be found on many of the maps listed under the names of cities in Section IX, CITY PLANS.

C. Language

A single tongue - the Korean language - is spoken throughout Korea. The pronunciations found in northern Korea vary somewhat from those in the southern provinces, but not sufficiently to prevent ready understanding between speakers of different dialects.

Areas where the various Korean dialects are spoken are clearly located on map (148) Spoken Korean Dialects, 1:10,000,000. Accompanying graphs show the number of persons speaking each dialect.

Item (109) A Study of Korean Dialects (Japanese text), includes several useful linguistic maps. The most significant appear to be Nos. 2-9, which use distinctive symbols to indicate how certain basic words are pronounced in different localities. Part of the pronunciation data is romanized. Map No. 10 in this study locates areas where main dialects are used.

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Map (11) Percentage of Native Koreans who Understand and Speak Japanese, 1:3,700,000, is a simple sketch map showing the approximate distribution of native Koreans who understand and speak Japanese.

Each map noted above covers all of Korea and presents linguistic data on a background of internal boundaries.

D. Ethnic Minorities

In 1941 the two most important minority groups in the Korean population were the Japanese, who comprised 2.9% of the population, and the Chinese who accounted for about 0.3%.

The Japanese have since been repatriated and are no longer an important minority. Their distribution at the time of their maximum occupancy is shown on map (16) Korea, Japanese in cities over 10,000, 1:4,000,000.

A sketchy picture of the distribution of Chinese in Korea is provided by a map ("Chinese Emigrants by District", 1:2,300,000) appearing in (131) A Study of Chinese Emigrants Settled in Korea on Fire Farms (Japanese text).

E. Social Statistics

Maps (18) Gross Reproduction Rates 1930, Japan, Korea, and Formosa, 1:14,000,000, and (19) Percent of Population Change, 10,000,000, are small-scale sketch maps covering all of Korea. Both use distinctive shadings to illustrate trends in population growth.

The maps noted below were prepared in 1946 by United States Occupation Forces in Korea. They cover only South Korea, presenting data on the police system, prisons, and crime rate.

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Map (141) Police -South Korea, 1:9,000,000, shows the authorized number of police by province and the distribution of divisional and district police offices. On map (142) Prisons and Prison Industries, 1:4,000,000, prisons are located and the number of inmates is indicated. Map (155) Civilian Prison Population, 1:6,000,000, indicates the distribution of civilian prisoners and classifies them as to sex, race, and legal status. Map (173) Criminal Offences, South Korea Provinces, 1:9,000,000, uses provinces as statistical units for graphically illustrating the yearly crime rate per 100,000 people. Map (153) Percent of School Age Children in School, 1:6,000,000, also uses provinces as statistical units and indicates the percent of school age children in school by distinctive shading.

F. Health

Medical facilities in Korea do not exist for the majority of the population and there are few recent, broadly based statistics from which accurate health maps can be prepared.

Map (204) Distribution of Typhus in Korea 1934-35, uses distinctive shading to show the typhus rate per 100,000 people.

Map (152) Ratio of Graduate Medical Doctors to Population, 1:9,000,000, is a small-scale sketch map covering South Korea only.

Some information on medical facilities in particular localities is offered by maps listed under the names of cities in Section IX, CITY PLANS.

G. Migration and Resettlement

Several rather recent, large-scale movements of people have an important relation to contemporary Korean affairs. Prominent among these are the migration of Koreans into eastern and southeastern Manchuria, the settlement of Japanese in Korea and their subsequent repatriation, and the recent repatriation of numerous Koreans formerly residing abroad.

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The distribution of Koreans in Manchuria is portrayed on several maps of which (52) Manchuria ("Manchukuo") Number of Koreans, 1:4,500,000 (1942-43 data) appears to be the best. Map (55) Koreans in Manchuria, 1:8,500,000 consists of two small-scale maps on one sheet. The first shows Koreans in Manchuria by province (1940 data) and the second indicates Koreans in cities with a population over 100,000 (1941 data). Map (33) Chosenese Immigration Map of Manchukuo, 1:9,000,000, distinguishes various types of Korean settlement areas in Manchuria (e.g. farm settlements, subsidized settlements).

The distribution of Japanese in Korea at the time of their maximum occupancy is shown effectively on map (16) Korea: Japanese in Cities over 10,000, 1:4,000,000 (1937-41 data).

There appear to be no available maps illustrating the dispersal of Koreans returning to Korea.

VIII. BOUNDARIES

A. International Boundaries

1. General

Korea is a peninsula with the Sea of Japan, the Korean Straits, and the Yellow Sea along its shores. The Yalu and Tumen Rivers form the greater part of its continental boundary.

The Yalu River is a conventional boundary which has been recognized by both China and Korea for several hundred years. Between the upper reaches of the Yalu and Tumen Rivers there is a small zone where the boundary is indefinite; this problem area is dealt with in detail in later paragraphs.

The Tumen River as a boundary between Korea and China is defined in the Treaty of Sept. 4, 1909, between Japan and China.

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The Treaty of Peking, 1860, appears to be the legal basis for Korea's eleven mile boundary with the USSR. Although the agreement between Russia and China (Korea was then under a vague Chinese suzerainty) is concerned primarily with the frontier in the Amur-Ussuri area, the text specifically mentions the lower reaches of the Tumen as forming the boundary between Russia and China.

Map (113) Korea 1:50,000 offers the largest scale coverage available for Korea's land frontier but the sheets of this Japanese text series rarely provide complete relief information for adjacent territories outside Korea.

Map (123) Korea 1:250,000, AMS L551 (AMS 2) effectively shows Korea's land boundaries and, with the joining sheets of a similar AMS set covering Manchuria, provides uniform coverage for adjoining areas on both sides of the boundary.

Map (195) Manchuria 1:500,000, AMS L401, which covers nearly all of Manchuria and Korea north of 40° N., is useful in considering problems related to Korea's land boundaries, particularly in the northeast.

2. The Paektu-san Area Boundary Problem

On maps, the Korean boundary has traditionally followed the Yalu to its headwaters, then to the Ch'ang-pai Shan (Korean: Paektu-san), -- a composite group of volcanoes enclosing a lake - and thence to the headwaters of the Tumen.

Many minor variations in the portrayal of the Korean boundary in the Paektu-san area have appeared on maps. Although a treaty between Japan and China, September 4, 1909, was to have settled the question, the inexact drafting of the agreement leaves many points in doubt.

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"Art. 1.-The Governments of Japan and China declare that the River Tumen is recognized as forming the boundary between China and Korea, and that in the region of the source of that river the boundary line shall start from the boundary monument and thence follow the course of the stream Shihyishwei."¹

Chinese maps of relatively recent date as well as Japanese maps based on data assembled prior to 1916 (when the Paektu-san area was surveyed by the Japanese) vary in locating the Shihyishwei (Korean: Sogol; Japanese: Sekiotsusui). Even though the best available maps agree that the Shihyishwei generally follows the 42nd parallel, there is still disagreement as to where the Tumen leaves off and the Shihyishwei begins (see Fig. I).

Japanese maps published in the last fifteen years adhere rather consistently to a border portrayal (boundary "A" on Figure I) which, presumably, would put the boundary monument noted in the treaty near the summit of Paektu-san (Ch'ang-pai Shan). Both (113) Korea, 1:50,000 and (192) Korea, 1:200,000 locate a boundary monument in this area but there is no way of determining whether or not this is the specific monument noted in the 1909 agreement.

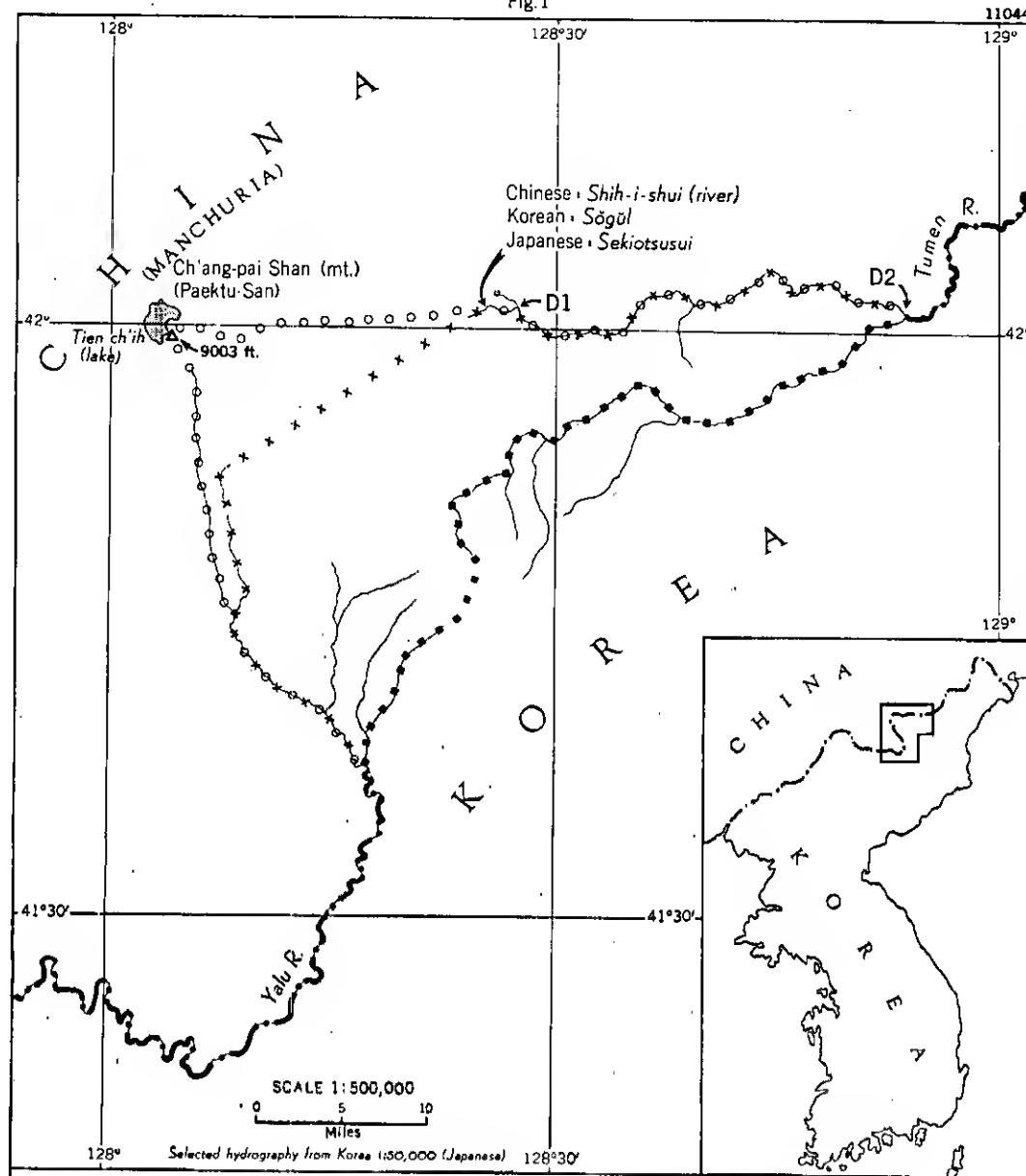
The Japanese presentation agrees quite closely with the portrayal found on a number of older maps prepared prior to the drafting of the treaty and is probably a reasonable interpretation of the conventional or traditional boundary.

Chinese maps published during the last fifteen years generally show the border going up a tributary of the Yalu and from there over a mountain pass to a tributary of the Tumen, thus completely by-passing Paektu-san. Although Chinese

1. John V. A. MacMurray, Treaties and Agreements with and Concerning China, 1894-1919 (New York, 1921), Vol. 1, pp. 796-797, "Agreement Relating to the Chientao region Sept. 4, 1909".

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Fig. 1



KOREA-CHINA BOUNDARY, LOCATION SKETCH

- — — International boundary where Chinese, Japanese and Korean maps agree.
- ○ ○ ○ ○ (A) Boundary generally used on Japanese maps and on most maps published in the United States. It follows the stream Shih-i-shui (Shihyishwei) (石乙水) mentioned in the treaty of Sept. 4, 1909 between Japan and China.
- × × × × (B) Boundary shown in the Ting atlas, 1934 (also follows the Shih-i-shui but connection with Yalu differs from Japanese interpretation).
- ■ ■ ■ ■ (C) Boundary used on sheet K 52 O, Korea 1:250,000, AMS L551 (AMS 2), 1946. This portrayal approximates alignment shown on Manchuria 1:300,000 and other Chinese maps.
- (D) On some maps the name "Tumen" is used between points D1 and D2; other maps apply Shih-i-shui to this stream.

maps are not consistent in indicating the alignment of this boundary they are rather consistent in avoiding the extension of the boundary to Paektu-san. Only one Chinese map dated 1931, was found which names the stream Shihyishwoi and locates the boundary in a manner agreeing with the Japanese interpretation noted above. The lines marked "B" and "C" on Figure I are approximations of the most common portrayals appearing on Chinese maps.

A desire on the part of the Chinese to foster a historical claim to the Paektu-san area may be at least a partial explanation for the varying Chinese boundary interpretations.

Shannon McCune, in an article titled "Physical Basis for Korean Boundaries"¹ recalls a Chinese official's explaining the Chinese version of the Paektu-san area boundary by making reference to the legend that the mountain was the place of origin of the Manchu dynasty and that therefore the entire mountain should belong to China.

As shown on maps, the varying Chinese interpretations of the Paektu-san boundary seem largely attributable to a lack of knowledge of the disputed area. Some Chinese maps bear so little resemblance to maps based on reasonably reliable Japanese surveys that the stream patterns can hardly be compared. There is no evidence to suggest that the Chinese have ever made detailed surveys southeast of Paektu-san and there is abundant evidence that, in the past, Chinese map compilers did not have access to the contoured 1:50,000 Japanese sheets covering this area. Although these factors do not entirely rule out the possibility that one of the Chinese portrayals (Boundary "B" on Figure 1) may have a plausible claim to legitimacy, they do cast a reasonable doubt.

1. The Far Eastern Quarterly, Vol. V, No. 3, May 1946.

Recently, various prominent American maps, such as (123) Korea, 1:250,000, AMS L551 (AMS 2), and the National Geographic Society map (137) Japan and Korea, 1:3,000,000, deviated from the portrayal generally found on maps published in the United States and showed a boundary alignment following one of the Chinese interpretations.

Although the existing maps of the upper reaches of the Yalu and Tumen Rivers are not entirely complete and reliable, the map evidence now available suggests that boundary "A" (see Figure I) is the most accurate map interpretation of the 1909 treaty.

B. Internal Boundaries

<u>Korean Name</u>	<u>Japanese Name</u>	<u>Type of Political Unit</u>
1. <u>to</u>	<u>do</u>	province
2. <u>pu</u>	<u>fu</u>	municipality
3. <u>kun</u>	<u>gun</u>	county
4. <u>up</u>	<u>yu</u>	town
5. <u>myon</u>	<u>men</u>	township

1. to: The boundaries of these first order political divisions are well established and correctly shown on almost half of the maps listed in this report. Map (113) Korea, 1:50,000 and (114) Korea, 1:50,000, AMS L751, provide the largest scale portrayal of to boundaries.
2. pu: The municipalities or major cities were regarded by the Japanese as being somewhat superior in status to counties and were supervised directly by the provincial government. In the later period of Japanese administration in Korea there was a trend toward including the suburbs

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within the cities and increasing the number of cities. Most of the changes in Korea's internal boundaries made during the last ten years involved pu cities and the surrounding towns, townships, and counties.

Pu boundaries are shown on maps (113) Korea, 1:50,000, and (114) Korea, 1:50,000, AMS L751, and (192) Korea, 1:200,000. The boundaries shown on these maps are usually correct if the sheet was revised in 1937 or later.

Pu boundaries are also shown on some of the maps listed under the names of cities in Section IX, CITY PLANS. Cities of pu status are identified on map (56) Korea Administrative Divisions, 1:2,000,000, though only a few of the 20 or 21 pu cities are large enough to have their areal extent show up on a map at this scale.

3. Kun: The counties numbered 218 in 1943 and their boundaries, which generally follow topographical features, are rather well established. Where irregularity in kun boundaries is found on maps it will generally be encountered in the environs of pu status cities. (See above).

A number of maps offer data on kun boundaries. Map (56) Korea Administrative Divisions, 1:2,000,000, which provides a useful, single-sheet picture of kun boundaries along with the boundaries of other administrative districts, is suitable for general desk use.

The largest scale representation of county boundaries will be found on (113) Korea 1:50,000 or the Army Map Service reproduction (114) Korea, 1:50,000, AMS L751. Useful medium scale portrayals are offered by (123) Korea, 1:250,000, AMS L551, (192) Korea, 1:200,000, (Japanese text) and (135) Korea Province Maps, 1:500,000 (Japanese text).

The atlas (8) Dai Nippon Fu-, Ken-Betsu Chizu Narabi Chimei Daikan, (Atlas of Japan, Maps of Cities of Prefectures with Gazetteer), (Japanese text), shows kun boundaries on various maps and provides a list of these divisions. Atlas (10) Atlas of Japan (Japanese text) contains a map 1:10,000,000 on which counties are used as statistical units to illustrate the relative density of population.

4. up: Towns boundaries are shown on the city vicinity series (94) Korea, 1:10,000, (113) Korea 1:50,000, the Army Map Service reproduction (114) Korea; 1:50 000, AMS L751, (192) Korea, 1:200,000, and (135) Korea Province Maps, 1:500,000. The town boundaries shown on these maps are more likely to be reliable if the sheet is dated 1937 or later.

Town boundaries are depicted on several of the maps listed under the names of cities in Section IX, CITY PLANS.

5. nyon: Townships are often larger than towns though their populations are generally smaller and their economic functions less important. The maps cited in the previous paragraph also show township boundaries.

Cheju (Quelpart) island and the capital city, Seoul (formerly a municipality), were given provincial status in 1946 by the military government in South Korea.

IX. CITY PLANS

In the following table Korean cities and towns with populations greater than 12,000 have been arranged according to population.

In the left column, Korean names have been listed prominently with Japanese forms and other variants given in parenthesis. Because of the variant names

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and the great similarity of numerous Korean names, geographic coordinates have been included to insure identification.

The title and number of the recommended city plan are given after each town name. The map's scale, language, and date are also indicated. Titles of alternate maps, given because of their ready availability or for other reasons, have been listed under Other Coverage. When "Janie Air Photos" appears in the Other Coverage column, this indicates that air photos covering all or part of the town appear in Chapter VIII, JANIS 75, April 1945.

In the final column, brief descriptive and evaluative comments are given to aid in selecting the most suitable map for a particular purpose.

Detailed descriptions of each numbered map noted in the table will be found under the appropriate number in Part Two.

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II. CITIES AND TOWNS OVER 12,000 POPULATION

POPULATION*	TOWN NAME AND COORDINATES	TITLE OF RECOMMENDED TOWN PLAN	SCALE & DATE	LANGUAGE	OTHER COVERAGE	REMARKS
935,464	KYONGSÖNG (Keijō) (Seoul)	(70) Kyongsong or Seoul (Keijō)	1:12,500 3/46	English	(81) Keijo-Jinsen Industrial Area, 1:25,000, 5/48. (43) Kyōngsōng etc. Water Supply Sketch, 1:47,000, JANIS Air Photos	Map (70) is a detailed city plan based on Japanese maps and recent air photos. An index on the reverse side names and locates precincts. Map (81), same style, shows industrial area and suburbs between Kyōngsōng and Inch'on (Jinhaen).
285,965	P'YONGYANG (Heijō)	(71) P'yongyang (Heijō)	1:12,500 10/46	English	(72) Heijo, Korea, 1:11,500, 13 Dec. '44 (air photo mosaic). JANIS Air Photos	(71) P'yongyang (Heijō); very reliable and complete, identification of installations particularly detailed, inset shows Jido coal mine region. The air photo mosaic (72) covers only part of city proper but extends coverage further east than the map, (71).
849,734	PUSAN (Fusan)	(73) Pusan (Fusan)	1:12,500 7/46	English	(74) Town Plan of Pusan (Fusan), 1:27,000, 2/45. (75) Pusan, Korea, 1:17,000, 17 Nov. '44 (air photo mosaic).	Map (73) Pusan (Fusan) provides fairly reliable coverage for the city proper and environs. Installations are identified. Map (74) is a smaller-scale plan suitable for illustrating reports. The air-photo mosaic is useful for its information on land utilization and as a check on other maps.
187,918	CH'ONGJIN (Seishin)	(76) Ch'ongjin (Seishin)	1:12,500 8/45	English	(77) Ch'ongjin (Seishin), Korea, 1:21,500 [44]. JANIS Air Photos	Map (76) Ch'ongjin (Seishin) is detailed, complete, and reliable. Map (77) Ch'ongjin (Seishin), Korea, on a smaller scale, is suitable for illustrating reports.

* Figures from JANIS 76.

POPULATION	TOWN NAME AND COORDINATES	TITLE OF RECOMMENDED TOWN PLAN	SCALE & DATE	LANGUAGE	OTHER COVERAGE	REMARKS
178,923	TAEGU (Taikū) 35°52'N., 128°35'E.	(78) Sketch Plan of Taegu (Taikyū).	1:17,500 12/45	English		The recommended plan appears to be the only reasonably modern plan of Taegu now available in Washington. Main installations are identified but the map is sketchy and incomplete.
171,165	INCH'ON (Jinsen) 37°29'N., 126°38'E.	(79) Inch'on	1:12,500 7/46	English	(81) Keijo-Jinsen Industrial Area, 1:25,000, 5/46. JANIS Air Photos	Map (79) Inch'on is a detailed, reliable, plan covering the city proper. Map (81) Keijo-Jinsen Industrial Area is also detailed and reliable but on a smaller scale. It covers the eastern portion of Inch'on and the industrial area between Inch'on and Kyōngsōng (Keijo) (Seoul).
120,000 *	HÜNGNAM (Konan) 39°50'N., 127°37'E.	(80) Hungnam (Konan)	1:10,000 5/45	English	JANIS Air Photos	The recommended plan is reliable and quite complete. It identifies the industrial installations near the city.
79,320	WÖNSAN (Genzan) 39°09'N., 127°26'E.	(82) Wonsan (Genzan)	1:12,500 2/45	English	JANIS Air Photos	(Same as above)
75,320	HAMHÜNG (Kankō) 39°54'N., 127°32'E.	(83) Hamhung (Kankō)	1:10,000 9/44	English	JANIS Air Photos	(Same as above)

* Population estimate from SURVEY OF KOREA, U.S. War Dept., 1944.

POPULATION	TOWN NAME AND COORDINATES	TITLE OF RECOMMENDED TOWN PLAN	SCALE & DATE	LANGUAGE	OTHER COVERAGE	REMARKS
72,062	KAESÖNG (Kaijō) 37°58'N., 126°33'E.	(85) <u>Sketch Plan of</u> <u>Kaesöng (Songdo)</u> <u>(Kaijō)</u> .	1:13,500 12/45	English	(84) <u>Keiki Kaijō</u> , 1:13,000. 1930 (Japanese text).	The recommended plan is little more than a rudimentary sketch showing main transportation features and a few important installations. It is preferred to the Japanese plan (84) <u>Keiki Kaijō</u> only because of its English text and ready availability.
68,676	CHINNAMP'Ô (Chinnampo) 38°43'N., 125°24'E.	(86) <u>Chinnamp'ô</u> <u>(Chinnampo)</u>	1:10,000 5/45	English	(87) <u>Chinnamp'ô Korea</u> , 1:11,700, 18 Dec. '44 (Air photo mosaic).	Map (86) <u>Chinnamp'ô</u> is detailed and reasonably reliable although it does not record all changes in the coastline shown on air photographs. The air photo mosaic (87) supplements the map.
64,520	KWANGJU (Kôshû) 35°08'N., 126°55'E.	(88) <u>Sketch Plan of</u> <u>Kwangju Kôshû</u>	1:14,000 12/45	English		The recommended plan is rather inadequate. It provides an outline of main transportation features and identifies a few major buildings.
64,256	MOKP'Ô (Moppo) 34°48'N., 126°23'E.	(89) <u>Mokp'ô (Moppo)</u>	1:12,500 3/45	English		The recommended plan is a detailed and reasonably reliable map covering the city and environs.
62,651	HAEJU (Kaishû) 38°02'N., 125°43'E.	(90) <u>Haeju(Kaishû)</u>	1:12,500 5/45	English		(Same as above)

POPULATION	TOWN NAME AND COORDINATES	TITLE OF RECOMMENDED TOWN PLAN	SCALE & DATE	LANGUAGE	OTHER COVERAGE	REMARKS
61,143	SINUIJU (Shingishū)	(91) <u>An-tung and Shingishu</u>	1:12,500 10/45	English		Map (91) <u>An-tung and Shingishu</u> is a fairly detailed plan covering Sinuiju and the adjacent Manchurian town Antung. Main transportation features are located and important installations are identified.
	40°06'N., 124°23'E.					
47,230	CHONJU (Zenshū)	(92) Sketch Plan of Chonju (Zenshū)	1:13,000 12/45	English	JANIS Air Photos	The recommended plan is a simple sketch showing main roads and railroads, and a few important buildings.
	35°49'N., 127°09'E.					
45,541	TAEJÖN (Taiden)	(94) Korea, 1:10,000 —Taejön (Taiden) sheet—	1:10,000 1917	Japanese		The recommended plan is a sheet of an older irregular topographical set covering many Korean towns and cities. Recent changes in transportation and other features are not shown.
	36°19'N., 127°26'E.					
43,281	CHINJU (Shinhū)	(94) Korea, 1:10,000 —Chinju (Shinhū) sheet—	1:10,000 1917	Japanese		(Same as above)
	35°12'N., 128°05'E.					
40,553	KUNSAN (Gunzan)	(93) <u>Kunsan (Gunzan)</u>	1:12,500 9/46	English		The recommended plan is detailed and reliable.
	35°59'N., 126°12'E.					
38,310	NAJIN (Raehin)	(95) <u>Najin (Raehin)</u>	1:20,000 1/45	English	(96) <u>Rashin Ko</u> , 1:16,500 2/45.	There is little to choose between (96) Rashin Ko, and the recommended plan (95) <u>Najin (Raehin)</u> . The former is on a larger scale but the latter presents more detail and covers a greater portion of the hinterland.
	42°10'N., 130°17'E.					

POPULATION	TOWN NAME AND COORDINATES	TITLE OF RECOMMENDED TOWN PLAN	SCALE & DATE	LANGUAGE	OTHER COVERAGE	REMARKS
37,500*	CHEJU (Saishū)	(136) <u>Chejū (Saishū Yu)</u>	c.1:20,000 4/45	English		The recommended plan, apparently the only coverage available, is a crude, rudimentary sketch.
			33°30'N., 126°31'E.			
36,428	MASAN	(97) <u>Masan</u>	1:12,500 2/46	English		The recommended plan is a detailed and reasonably reliable map covering the city and environs.
			35°12'N., 128°34'E.			
31,259	YOSU (Reisui)	(98) <u>Yosu, Reisui</u>	1:10,000 5/45	English		(Same as above)
			34°45'N., 127°44'E.			
30,143	CH'ONGJU (Seishū)	(106) <u>Sketch Plan of Ca'ongju (Seishū)</u>	1:13,500 12/45	English		The recommended plan is a sketch showing roads and railroads, built up areas, and a few important buildings.
			36°39'N., 127°29'E.			
23,495	SÖNGJIN (Jōshin)	(99) <u>Jōshin (Songjin) Plan of Port and Town</u>	1:12,000 44			Map (99) is sketchy and inadequate. Main transportation features are shown but only a few installations are identified.
			40°40'N., 129°11'E.			
23,462	SUNCH'ON (Junten)	No plan available August 1948				
			38°25'N., 125°55'E.			
22,821	HOERYONG (Kainei)	(94) <u>Korea, 1:10,000- Hoeryong (Kainei) sheet</u>	1:10,000 1919	Japanese		The recommended plan is a sheet of an older, irregular, topographical set covering many Korean towns and cities. Recent changes in transportation and other features are not shown.
			42°26'N., 129°45'E.			

*Population estimate from Survey of Korea, U.S. War Dept., 1844.

POPULATION	TOWN NAME AND COORDINATES	TITLE OF RECOMMENDED TOWN PLAN	SCALE & DATE	LANGUAGE	OTHER COVERAGE	REMARKS
22,085	UNGGI (Yuki) 42°19'N., 132°22'E.	(100) <u>Unggi (Yuki)</u>	1:20,000 4/45	English	(101) <u>Unggi (Yuki)</u> Korea 1:17,500, 1945	The recommended plan is slightly more detailed than map (101). Both are based in part on air photographs.
21,335	I-48 (Ri-ri) 35°57'N., 128°57'E.	(103) <u>Sketch Plan of I-ri (Ri-ri)</u>	1:13,000 12/45	English		The recommended plan is a simple sketch showing main transportation features, built up areas, and a few important buildings.
21,258	NANAM (Ranan) 41°43'N., 129°11'E	(102) <u>Map of Ranan</u>	c. 1:12,000 1944	English & Japanese		(102) <u>Map of Ranan</u> is copied from a Japanese plan with an incomplete English text added. It is reasonably reliable and complete although parts are difficult to read.
20,051	KYOMIP'Ô (Kenjihô) 38°44'N., 125°38'E.	(104) <u>Kyomip'ô</u>	1:12,500 2/45	English	JANIS Air Photos	The recommended plan is exceptionally clear, detailed, and reliable.
18,988	CHINHAE (Chinkai) 35°09'N., 128°40'E.	(105) <u>Chinhae (Chinkai)</u>	1:12,500 1/45	English		(105) <u>Chinhae (Chinkai)</u> is detailed and reasonably reliable.
15,250	P'OHANG-DONG (Hokô-dô) 36°02'N., 128°22'E.	(107) <u>Sketch Plan of P'ohang-dong (Hokô-dô)</u>	1:13,500 12/45	English		The recommended plan is sketchy showing only main transportation features, built up areas, and a few important installations.
12,500	CHÔNGJU (Teishû) No plan available August 1948					
	39°41'N., 128°13'E.					
	MUSAN (Mesan) 42°12'N., 128°19'E.	(108) <u>Musan (Mesan)</u>	1:25,000 5/45	English		Map (10.) Musan (Mosen) gives little detail for the town proper but identifies major installations in the town and nearby areas.

X. MAP SOURCES

A. Producers and Distributors

Prior to V-J Day, the Land Survey Bureau under the Government-General of Chosen was the dominant mapping organization in Korea. This agency was staffed largely by Japanese trained in Japan's Imperial Land Survey. The maps produced reflect the Imperial Land Survey's cartographic techniques and standards.

In addition to topographic maps of Korea, the Land Survey Bureau is believed to have drafted and reproduced specialty maps from data assembled by other agencies of the Government-General of Chosen.

During the war, various United States Government Agencies such as the Army Map Service, the Office of Strategic Services and the Foreign Economic Administration, produced numerous maps of Korea. For the most part these were compilations in which current data from intelligence sources were superimposed on physical and cultural patterns copied from maps prepared by the Land Survey Bureau. Because of the availability of distribution copies in the United States, some of these wartime maps will remain important to American users for several years to come.

During the period of military occupation, the United States Army Military Government in Korea and the United States Army Map Service were the most important producers and distributors of maps covering Korea.

The organization plan of the American Military Government in South Korea provided for a Bureau of Surveys under the Department of Public Works. Although work accomplished since the repatriation of the Japanese has not been extensive, it is assumed that the Bureau of Surveys will eventually become Korea's primary producer of maps.

Other Korean agencies assigned surveying and mapping functions by the American Military Government include:

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- (a) Marine Transport Bureau, Harbor Section, Department of Transportation.
- (b) Geological Survey, Bureau of Mining, Department of Commerce.
- (c) Irrigation and Reclamation Section, Department of Agriculture.
- (d) Forestry Section, Department of Agriculture.
- (e) Coast Guard Section, Department of Internal Security.

These organizations have been handicapped by a lack of expert advisors. In some fields their work has been confined to planning or to the overlaying of specialized data (forests and reclamation) on Army Map Service maps.

Privately published maps of Korea are not numerous and most of those appearing during the last ten years were prepared by Japanese firms which, in all probability, will not remain active in the publication and distribution of maps covering Korea.

One Korean concern, the Han Yang Products Company of Kyōngsōng (Seoul), has in the past distributed a general map of Korea.

B. Collections

It is highly probable that the most complete map collection in Korea was once associated with the central offices of the Land Survey Bureau in Kyōngsōng. Map procurement teams connected with the American occupation forces in southern Korea searched this accumulation and procured many maps (mostly topographic sheets) for shipment to the U.S. Army Map Service. Nothing is known regarding the present condition of this collection and very little can be inferred from the maps sent to the United States for these have not yet been adequately processed.

Although only conjectural conclusions can be drawn regarding the condition and status of smaller map collections in Korea, it seems probable that a few small collections are held in main government offices, colleges, schools, libraries, museums, and in local administrative centers.

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Such collections may have been searched by U.S. map procurement officers.

XI. CONCLUSIONS

A. Status of Coverage (Deficiencies)

Korea, though not as completely and accurately mapped as Japan proper, is still one of the best mapped countries in the Far East. A fairly dense triangulation network covers the whole country and a good basic survey has been made at the scale of 1:50,000.

The single greatest deficiency in Korea map coverage appears to be the lack of recent cultural data on the existing 1:50,000 topographic sheets. There is a serious need for revision surveys directed toward updating cultural information on this important set. Other large scale sets, such as the 1:25,000 and the 1:10,000 city vicinity series are also in need of revision.

For many years the 1:200,000 set covering Korea was the primary medium scale map of the country. A revised edition was prepared in 1937 but, as far as American users are concerned, this set has been largely superseded by the appearance of the new AMS 2, 1:250,000 sheets [map (123) in this report].

Korea is rather well covered by a variety of general maps and specialty maps ranging from 1:500,000 to smaller scales. The completeness and reliability of these are in direct proportion to the permanency of the relationships portrayed.

In connection with specialty maps, there are several deficiencies which can be attributed to the arbitrary division of Korea into separate occupation zones. For South Korea, subjects such as industry, agriculture, fishing, telecommunications, social statistics, and trade are rather adequately covered by recent small-scale maps prepared by the United States Occupation Forces. Where maps depicting areas north of the 38th parallel are desired, it is often necessary to rely on

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out-of-date Japanese maps or compilations of doubtful reliability prepared in the United States during the war.

There is a very definite need for a good wall map of Korea emphasizing major features and presenting place names in type styles large enough to permit reading at a distance. An adequate map showing distribution of population in relation to internal political divisions is also needed.

Between 1917 and 1923 the Japanese prepared an extensive series of city plans scaled at 1:10,000. Some of these were revised in the late 1930's but the majority are now badly out-of-date. Privately published plans of varying quality were prepared for only a few major cities. During the war, the U.S. Army Map Service undertook the compilation of a series of Korean city plans. In many cases the 1:10,000 Japanese plans were used as a base on which data from air photographs, hydrographic charts, intelligence reports, and other sources were added. Korea's most important cities and many other towns are now covered by adequate plans.

Korea is completely covered by relatively recent air charts scaled at 1:1,000,000 and 1:500,000. Aeronautical approach charts scaled at 1:250,000 provide nearly complete coverage.

Hydrographic charts portraying Korea's coasts have been prepared by the chart publishing agencies of numerous countries including the United States. The Japanese, who conducted most of the original surveys, have prepared the greatest number of charts. Southern Korea is particularly well-covered by large-scale Japanese charts.

Air photo coverage of varying quality is available for at least half of Korea. Most major cities, strategic zones, and economically important areas have been photographed. Air photos were used by the Army Map Service in compiling various AMS set maps and city plans.

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B. Trends

Korea is the only country where the United States meets the USSR alone, without the association of other powers. The 38th parallel, conceived as a temporary administrative line to be used in disarming the Japanese, has become a fixed barrier which restrains Korea's economic life. Serious problems revolving around this unnatural boundary, together with the country's critical position in relation to Japan, China, and the USSR, have greatly increased interest in the maps of Korea. This interest may continue for several years.

Intensified American interest in maps of Korea is mirrored by recent Army Map Service activities. A revised edition of (123) Korsa, 1:250,000, AMS L551, was recently completed and the Army Map Service now has plans for extending the coverage of (114) Korea, 1:50,000, AMS L751, to include northern Korea. Sheets covering coastal areas will be prepared first and all or part of this set will be redrafted and printed in color.

The existence of the 38th parallel as a boundary between separate occupation zones is already reflected in the available map coverage. If this arbitrary division of the country continues, there will probably be increasingly greater differences in the relative completeness and reliability of the coverage available for North and South Korea.

The early development of a Korean mapping program can greatly facilitate the orderly rehabilitation of the country. Many special problems such as the appraisal of Japanese assets in Korea, the use of reparations, land reform, and economic adjustment when the 38th parallel is eliminated as a trade barrier, will require maps to illustrate their complexities.

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As noted previously, the American Military Government plan for South Korea calls for the establishment of various governmental agencies which will prepare maps essential to their functions. To date, the work accomplished by these agencies has not been extensive.

In the last fifty years, Koreans have had little or no hand in the mapping of their country. The development of an effective mapping program, to be carried on at all levels by Koreans, will require many years. The future of such a program will be shaped largely by circumstances surrounding the termination of military occupation.

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PART TWO

ANNOTATED LIST OF MAPS, ATLASES, AND
OTHER MATERIALS

The maps cited previously under the various subject headings in Part One are described more fully in this section. Data on publishers, publication dates, availability, and reproduction possibilities are included.

(1) Korea Roads and Railroads, 1:2,000,000, 28 Feb. 1945, Office of Strategic Services, (CIA 6336 with relief, CIA 6171 without relief).

This is a useful small-scale, transportation map covering all of Korea. Although it is based on data collected during the war, it still provides a reasonably reliable picture of Korea's main transportation network. The map is printed on a sheet measuring 13" x 24", and is suitable for desk use.

On the relief edition, CIA 6336, relief is shown with plastic shading in light green. This is omitted on the plain edition, CIA 6171.

Roads (primary, other selected roads) are located and four classes of railroads are shown. Areas containing numerous railroad tunnels are identified with shading; symbols locate four types of railroad facilities (major repair shop, minor repair shop, roundhouse or engine shed, principal freight yard). Names of railway lines are given in a table and keyed to letters and numbers which appear alongside the railroads on the map. Navigable streams and principal ports are identified by symbol.

Copies are available in quantity in the Map Branch, CIA.

(2) Korea, Special Strategic Map, 1:2,000,000, U.S. Army Map Service, AMS 5207, First Edition (AMS 2), Revised 1944.

This map covers all of Korea and part of Manchuria.

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Principal relief features are clearly hachured. Spot heights are in meters. Two classes of roads are shown in red. The legend identifies double track, single track, and electrified railway lines. Four classes of towns and cities are given.

Copies are available in quantity in the Map Library, Army Map Service.

(3) Korea (Chōsen), 1:1,200,000, 5 January 1945, Office of Strategic Services (CIA 3225).

This is a general map covering all of Korea. Cultural data are emphasized; physical information is limited to a portrayal of hydrography.

The map gives a good picture of the distribution of settlements. It also locates many secondary roads not shown with equal clarity on other single sheet maps covering the whole country.

Three classes of settlements are located. Although all of the larger towns are named, many villages are shown only by symbol. Distinctive red lines locate two types of roads. Province boundaries are shown on the main map; province names (with variants) are given in an inset.

Copies are available in quantity in the Map Branch, CIA.

(4) Japan and Eastern Asia, 1:7,500,000, 28 June, 1945, Office of Strategic Services (CIA 5940).

This is a useful desk-size map suitable for plotting trade routes and other types of information. It illustrates the position of Korea in relation to nearby Asiatic countries. Korea and Japan are centered. Manchuria, eastern China, and portions of the USSR are also shown.

Five classes of towns and cities are located. International boundaries and selected transportation features are shown.

Copies are available in quantity in the Map Branch, CIA.

(5) Japan Road Map, 1:1,000,000, Aug. 1945, United States Army Map Service (AMS L302).

This useful transportation set covering Japan and adjacent areas was pre-

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pared on the modified polyconic projection of the international map of the world. Sheet No. 4, Korea, covers the entire country except a very small zone in the northeast. The following descriptive remarks apply only to sheet No. 4.

Although the transportation data were collected during the war, this map still provides a fairly reliable picture of the country's transportation system. Road alignment is correct but the classification of roads must not be thought of in terms of United States road standards.

The sheet is a well-rounded general map of Korea. In addition to its transportation data, it provides a vivid picture of relief and hydrography. The plastic shading of relief has been copied from a base prepared by the U.S. Geological Survey See (27) Korea, 1:1,000,000. Numerous spot heights are given in meters.

Three classes of railroads ($4'8\frac{1}{2}$ " gauge, narrow gauge, reported under construction) and three types of roads (principal motor roads, other roads, trails) are identified. Ferries and some bridges are located but tunnels are not shown. Symbols and various types styles are used to identify four classes of towns and cities.

Copies are available in quantity from the Army Map Service.

(6) Korea (Summary) Terrain Intelligence, Strategic Engineering Study #149, prepared by the Geological Survey, Department of the Interior under direction of Chief of Engineers, published by Military Intelligence Division, Office, Chief of Engineers, U.S. Army, May 1945.

This 85 page special report summarizes terrain data pertinent to military operations. It includes text, tables, diagrams, photographs, and many useful maps; the most noteworthy are described in detail below.

Each map covers all of Korea. In most cases the background data (contours, roads, railroads, towns, and place names) are taken from sheets NI-52, NJ-51, NJ-52, NK-51, and NK-52 of (32) Eastern Asia, 1:1,000,000.

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Cross-Country Trafficability, 1:1,000,000, page 29.

Classifies soil types and rates main types (for each month of the year) according to capacity for carrying vehicular and pedestrian traffic.

Reliability is fair. Trafficability data are presented on a fairly complete background of physical and cultural data.

Rivers, 1:1,000,000, page 32.

Presents detailed data on navigability and crossings (road bridges, railroad bridges, ferries, fords) on a fairly complete background of physical (contours, spot heights) and cultural (towns, roads, railroads) data.

Reliability is good.

Water Supply: General Features, 1:1,000,000, page 48.

Classifies Korea's terrain according to water supply conditions; background of physical and cultural data is quite complete. Reliability is good.

Water Supply: Municipal Systems and Sewage Disposal, 1:1,500,000, page 50.

This map is keyed to the text on adjoining pages where details on individual city water supply and sewage systems are given along with reliability estimates of the data pertaining to each town.

Suitability for Airfields, 1:1,000,000, after page 54.

Suitability of areas for airfield construction is shown with six colors keyed to a detailed legend. In addition to a general evaluation of each classification, the legend provides data on construction materials, foundation and subgrade, clearing and grading, accessibility, topography, and approaches. Various symbols identify existing airfields and indicate runway lengths, types of aircraft that can be handled, etc. Airfield data are presented on a fairly complete background of physical (contours, spot

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heights) and cultural (towns, roads, railroads) information. Reliability is good.

Road Construction and Maintenance, 1:1,000,000, page 62.

Classifies Korea's land surface according to the prevalence of conditions that favor or retard road construction and maintenance. Road construction data are presented on a fairly complete background of physical and cultural information. Reliability is fair.

Soils: Engineering Properties, 1:1,000,000, page 66.

Provides a fairly detailed classification of Korea's soils. The map is keyed to adjoining tables which include soil profiles and a wealth of detail on permeability, drainage, value as a source of aggregate, resistance to frost injury, etc. Reliability is fair; background physical and cultural data are quite complete.

Sources of Construction Materials, 1:1,000,000, page 71.

Locates wide areas where sand, gravel, and quarriable rock are available. Also pinpoints placer sites, mine dumps, cement plants, limestone quarries, and granite quarries. Reliability ranges from good to excellent; background physical and cultural data are quite complete.

Geology, 1:1,000,000, page 74.

Uses color or shade variations to locate fourteen major rock types which are named and identified in relation to the geological time scale. Several pages of interpretive text follow the map. Reliability ranges from good to excellent; background physical and cultural data are quite complete.

For American users, availability and English text will make this map more useful than the Japanese original--(130) General Geological Map of

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Chōsen (Korea), 1:1,000,000 -- on which it is based.

Coal, 1:2,000,000, page 80.

Locates coal deposits. Anthracite and lignite deposits are differentiated but producing and potentially productive areas are not. Coal information is overprinted on (2) Korea, Special Strategic Map, which provides a generalized background of physical and cultural data.

Vegetation, 1:1,000,000, page 83.

Apparently the best available single-sheet vegetation map of Korea. The country's vegetation is divided into six main types (two categories for crops, four for natural vegetation); the distribution of each is shown. Reliability is fair; background physical and cultural data are quite complete.

Strategic Engineering Study No. 149 is available in Reference, Department of State and in numerous other Government libraries.

(7) Railroads of Korea, 1:2,500,000, 1944-?, no authority for data, reproduced by U.S. 955 Engineer Topographic Company, Aviation.

This is a useful, three color, railroad map covering all of Korea. It is one of the few English text maps of Korea devoted solely to the presentation of railroad data.

Four classes of government railroads and three classes of private railroads are identified. Precise gauge figures are given for each line. Railroads under construction are specially marked.

Single and double track railroads are distinguished. Important bridges, repair shops, classification yards and other features are noted with conspicuous red symbols. An inset shows province boundaries.

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A reference copy of this map is available in the Map Library, Army Map Service. Call number: 53L 1-23.5-90126-1500.

Black and white copies of limited usefulness can be made.

(8) Dai Nippon Fu- Ken-Betsu Chizu Narabi Chimei Daikan (Atlas of Japan, Map of Cities and Prefectures with Gazetteer), [1937-?], compiled by the Japanese Geographical Association (?), Osaka. Reprinted, 1943, by Division of Naval Intelligence, Far Eastern Theatre, under romanized title: "Atlas of Japan", (Japanese text).

In this atlas, Japan proper is emphasized but Korea and other parts of the former Japanese Empire are also shown.

Pages 345-92 deal with Korea. The main feature of the atlas is a systematic breakdown of civil divisions for each province. Name lists for kun (countries), do (islands), pu (municipalities), up (towns), and myon (townships), are given. The boundaries of provinces and kun are shown on a general map of Korea, scale 1:1,400,000, page 350. The map also provides information on the division of Korea into military districts. Unfortunately, on the photo-offset reproduction, prepared by the Division of Naval Intelligence, the names and boundary data are not very clear and only a small part of the information can be considered usable.

In addition to the map noted above, the atlas includes a general map of Manchuria and Korea, 1:2,900,000; a transportation map of Korea, 1:8,000,000; and a transportation map of Korea, 1:2,000,000. Of these, the Korea transportation map (entirely legible) is by far the most useful. It gives road, railroad, and sea route distances between all major towns and cities. Post and telegraph offices are located and one major air route is shown. Other cultural features such as mines, temples, and shrines are identified by symbol.

A reference copy of this atlas (photo-offset reproduction) is available in the Map Branch, CIA, and in numerous other Washington libraries.

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(9) Shin Nippon Zuchō (New Atlas of Japan); compiled by Fujita, Motoharu; Toko Publishing house, Tokyo, 1935, reprinted by U.S. Army Map Service under romanized title: "New Atlas of Japan" (Japanese text).

This is a carefully compiled atlas covering Japan and adjacent areas. The main Korea map is scaled at 1:2,000,000. Korea is also shown on several smaller-scale specialty maps (geology, political divisions, climate) covering all of the former Japanese Empire.

The maps themselves are not impressive but the atlas is outstanding because of its valuable 218 page gazetteer in which place names in Korea (Sino-Korean characters) are indexed along with those of Japan. Japanese pronunciation is indicated and each gazetteer entry includes number and grid references to the accompanying maps. This gazetteer is highly regarded by the U.S. Board of Geographic Names as a source for Japanese readings on place names in Korea. Because of its value as a place name source, the atlas was reproduced by the Army Map Service in 1943. In these monochrome, photo-offset reproductions, the gazetteer is remarkably legible but the Japanese characters and other data appearing on the maps are not very clear.

Distribution copies (photo-offset reproductions) of this atlas are available in the Map Library, Army Map Service. Reference copies (reproductions) are to be found in the Map Branch, CIA, and in many other Washington libraries.

(10) Atlas of Japan, 3rd Revised Edition, 10 Nov. 1938; compiled by Tanaka, Keiji, Meguro Shoten, Tokyo (Japanese text).

This is a small, though carefully prepared, atlas. Japan proper is emphasized but some of the maps (population, transportation, geology, climate) cover all of the former Japanese Empire. The atlas contains several maps devoted solely to Korea. These are found between pages 35 and 38.

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The group includes one city plan, six regional maps, two general maps, two climate maps, one transportation map, one population map, and one soil map. Many of these are on small scales and although it is convenient to have them together in one book, only two offer data on Korea not covered better elsewhere.

These are:

Page 44 (population), 1:10,000,000, which provides two separate portrayals of the distribution of population in the Japanese Empire; (A) On a dot distribution map. (B) With colors graded in proportion to population density on a map locating to (province) and kun (county) boundaries.

Page 37 (soils), 1:4,000,000, which shows the distribution of three main soil types on a base including province boundaries, hydrography, and main cities.

The atlas includes a brief gazetteer in which place names in Korea (Sino-Korean characters) are indexed along with those of Japan. Japanese pronunciation is indicated and each gazetteer entry includes number and grid references to the accompanying map.

A reference copy of this atlas is available in the Map Branch, CIA. No usable black and white copies can be made.

(11) New Map Collection, revised edition, 23 Dec. 1940; compiled by Moriya, Michio; Imperial Book Co., Ltd., Tokyo (Japanese text).

This is a small, but carefully drafted, atlas of the former Japanese empire. Japan proper is emphasized but the atlas also contains several maps pertinent to Korea. The best of these are found between pages 59 and 64.

This group includes six city plans and city vicinity maps (scales 1:65,000 to 1:500,000), two geological maps, one general map (1:3,000,000), three climate maps, one population map, a plastic relief sketch, one map combining soils and fishing data, and two trade maps.

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Many of these maps are on scales as small as 1:25,000,000 and 1:35,000,000. It is convenient to have the group together in one book but only three offer information that is not covered better on other maps.

These are:

Map 2, page 62, 1:6,000,000, which, in addition to its information on soils, gives considerable data on offshore fishing (fishing areas, types of fish, volume of catch).

Map 1, page 63, 1:10,000,000, which indicates commodities imported and exported at main Korean ports.

Map 2, page 63, 1:35,000,000, which is a very small-scale sketch illustrating the pre-war volume of traffic and main trade routes between Korean and Japanese ports.

The atlas includes a brief gazetteer in which place names in Korea (Sino-Korean characters) are indexed along with those of Japan. Japanese pronunciation is indicated and each gazetteer entry includes number and grid references to the accompanying maps.

(12) Kleiner Atlas von Japan, 1939, Deutsche Gesellschaft für Natur- und Volkskunde Ostasiens, Otto Harrassowitz, Leipzig, (German text).

This small atlas is similar in scope to (10) Atlas of Japan, and (11) New Map Collection, although the maps are not as finely drafted.

Japan proper is emphasized but the atlas also includes maps pertinent to Korea. The best of these are noted in the following tabulation. Asterisks indicate maps offering data not covered or not so effectively covered by other available materials.

"Rpdr." after a subject designation indicates that the map will yield black and white copies of limited usefulness.

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<u>Page</u>	<u>Subject or type of map</u>
26	general map (rpdr.)
28	temperature and rainfall
*29	mulberry trees (rpdr.)
	A sketchy distribution dot map.
*29	horses and cattle (rpdr.)
*29	rice cultivation (rpdr.)
*30	land use and economy, including fishing
	Locatee boundaries of main sericulture districts. The data on land use and fishing are covered better on other maps.
31	population (rpdr.)
*33	value of mineral products
	Shows mineral values in Japanese yen with distinctive coloring applied to provinces; facilitates comparison with similar data for Japan. Indicates main minerals exploited in specific areas.
34	transportation (rpdr.)
*35	volume of traffic on land and sea routes (rpdr.)
	A simple sketch on which the thickness of lines portraying routes is proportional to the volume of traffic.

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The general map is scaled at 1:3,000,000; all others are at 1:10,000,000 or smaller.

The atlas contains a two thousand entry gazetteer in which place names in Korea (romanized) are indexed along with those of Japan and other parts of the former Japanese Empire. Locations are indicated with page and grid references to the maps.

A reference copy of this atlas is available in the Map Branch, CIA.

(13) Climatic Atlas of Japan and her Neighbouring Countries, (1928-?), Central Meteorological Observatory, Tokyo (text in English and Japanese).

This comprehensive atlas includes over one hundred and fifty maps covering Japan, Korea, Formosa and parts of Manchuria. The volume summarizes the climate records of Japan and adjacent areas for the thirty years 1897 to 1926. It is an important source for climatic data on northeastern Asia.

The maps are at various scales; some as large as 1:6,500,000 and others as small as 1:14,000,000. The introductory pages include a list of weather stations, names romanized and in Japanese characters. Coordinates and altitude figures are given for each station and all stations mentioned in the text are located on a key map. The explanatory text provides information on the source of the data, years of observation, instruments used, etc.

The following are covered by maps:

- a. Isotherms.
- b. Atmospheric pressure and direction of winds.
- c. Mean monthly wind velocity.
- d. Vapor tension.
- e. Relative humidity.
- f. Cloud cover.

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- g. Number of clear days.
- h. Number of cloudy days.
- i. Sunshine duration.
- j. First and last hoarfrost dates.
- k. Days free from hoarfrost.
- l. Dates of first snowfall.
- m. Dates of last snowfall.
- n. Days without snowfall.
- o. Dates of the first freezing of water.
- p. Evaporation.
- q. Mean monthly rainfall.
- r. Number of days with rain.

For most of the topics noted above the atlas provides a series of twelve maps, one for each month, and several additional summary maps showing average conditions.

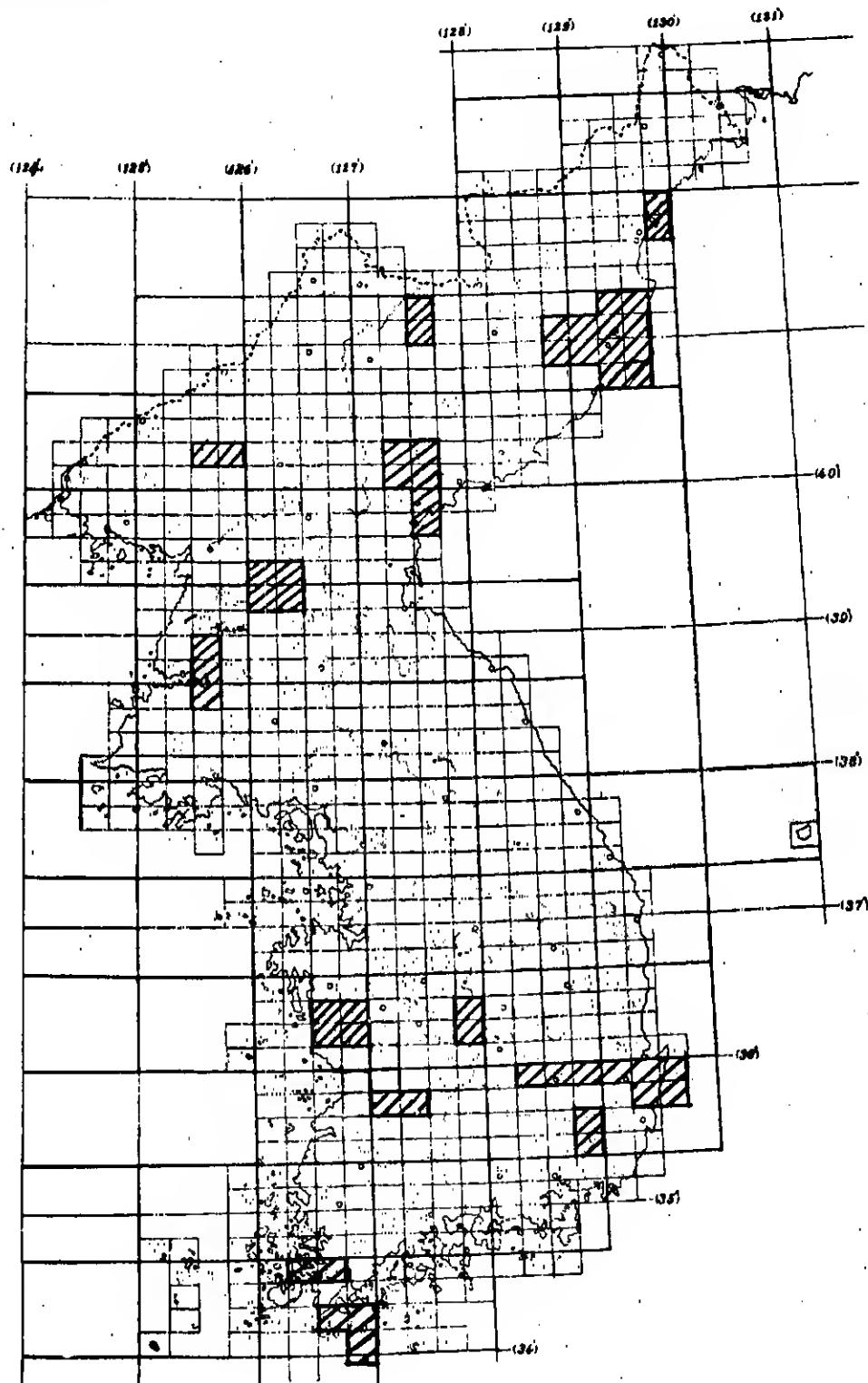
A statistical table at the end of the atlas presents a tabulation for one hundred and twelve rainfall stations in Korea. This list gives the date the station was established, average rainfall for each month, average annual rainfall, maximum daily amount of rainfall, and the average number of days with precipitation.

A reference copy of this atlas is available in the Map Branch, CIA.

Usable black and white copies can be made of most of the maps.

(14) Geological Atlas of Chosen, main maps 1:50,000, c. 1924-35, Geological Survey, Government-General of Chosen.

This atlas is the principal source for detailed geological information on Korea. Until about 1937 it was being published progressively in numbered portfolios. Each portfolio includes interpretive text and two or more 1:50,000 geological sheets following the sheet pattern of the 1:50,000 topographical map of



 Available 1:50,000 sheets of Geological Atlas of Chosen.

Korea [see (113) Korea, 1:50,000].

Contours and cultural data have been copied from the topographical map with little change and geological information has been printed in color on this base. Each sheet carries a logically arranged legend identifying the geological formations in both English and Japanese. "Known" and "probable" geological boundaries are distinctively marked as are known and probable fault lines. Strike and dip is indicated and plant fossil localities are identified. When appropriate, symbol identification is provided for mines, quarries, and clay pits.

In many of the portfolios the interpretive text is in Japanese with a brief accompanying abstract in English. However, some issues have complete texts in both English and Japanese. Texts are illustrated with helpful sketch maps, profiles, diagrams, and photographs.

Reference copies of about 50 sheets are available in the Map library, Army Map Service (call No.: S14-GSC-50) and in the Library, U.S. Geological Survey.

(15) Guide to Geographical Names in Korea (Chōsen), July 1945,
Special Publication No. 51, U.S. Board on Geographical
Names, Department of the Interior.

This useful 197 page work presents a detailed system of directions for the treatment of geographical names in Korea. It includes evaluation of maps and other materials as place name sources, a glossary, a bibliography, a list of the Board's decisions on Korean names, a section on language and orthography, and other pertinent data.

Distribution copies can be obtained through the U.S. Board on Geographic Names, Department of the Interior. Reference copies are available in the Map Branch, CIA and in other Washington libraries.

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(16) Korea, Japanese in Cities over 10,000, 1:4,000,000,
23 February 1945, Office of Strategic Services.
(CIA 6128).

This simple distribution map covering all of Korea shows the distribution of Japanese prior to their repatriation, 1945-46.

Province boundaries are located and main towns are shown. A circle, printed near each city is proportional in size to the number of Japanese residing in the city as of 1937-39. Percentage figures printed near the circles indicate the proportion of Japanese in each city's total population.

On an inset titled "Total Japanese in Korea by Provinces," circles printed in each province are proportional in size to the province's total population. Divisions of the circles (colored red) represent the pre-1945 Japanese minority.

Distribution copies are available in the Map Branch, CIA.

(17) Percentages of Natives Koreans who Understand and Speak Japanese, 1:3,700,000,
1943, U.S. War Department.

This simple sketch map covering all of Korea shows the distribution of Koreans who speak and understand Japanese. Distinctive shadings, keyed to a legend, give percentage figures.

The map appeared as figure 8 in Survey of Korea, published by the U.S. War Department, 1943. Usable black and white copies can be made.

A limited number of distribution copies are available in the Map Branch, CIA.

(18) Gross Reproduction Rates 1930 Japan, Korea, Formosa, 1:14,000,000, data from Office of Population Research, Princeton University; appears in The Far Eastern Quarterly, p. 303, Vol. V, No. 3, May 1946, Columbia University Press, New York.

This is a small-scale sketch map covering Japan, Korea, and Formosa.

The gross reproduction rate throughout Korea is shown with distinctive shading keyed to legend giving percentage figures.

Copies of the periodical in which this map appears are available from the publisher. Reference copies are available in the Main Reading Room, Library of Congress and in other libraries.

Usable black and white copies can be made.

(19) Percent of Population Change, 1:10,000,000, data from Office of Population Research, Princeton University; appears in The Far Eastern Quarterly, p.305, Vol. V, No.3, May 1946, Columbia University Press, New York.

This is a small-scale population map covering all of Korea. Although it is sketchy and has incorrect coordinates the map effectively illustrates trends in population change.

The relative darkness of the distinctive shading used on the map is proportional to the percentage of population increase 1935-41. Percentage figures for each of the six shades are given in the legend.

Copies of the periodical in which this map appears are available from the publisher. Reference copies are available in the Main Reading Room, Library of Congress and in other libraries.

Usable black and white copies can be made.

(20) Gazetteer to Maps of Korea, Sept. 1945, U.S. Army Map Service.

This gazetteer, despite certain inadequacies, is the most important locational guide for Korea. The volume contains about 18,000 names arranged in a single alphabetical sequence. The names are romanized in accordance with the McCune-Reischauer system approved by the U.S. Board on Geographic Names.

The names in the gazetteer were taken from the first edition (AMS 1) sheets of (123) Korea, 1:250,000, AMS L551, which, in turn, derived most of its names from (192) Korea, 1:200,000. At the time the gazetteer was prepared there were several 1:200,000 sheets available only as photo copies and on some of these the ideographs were not always legible. Thus, some of the names on the first edition (AMS 1) sheets of

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(123) Korea, 1:250,000, AMS L551 and in the gazetteer are not reliable. The second edition (AMS 2) of (123) Korea, 1:250,000, AMS L551, which derives most of its names from (113) Korea, 1:50,000, contains a much more complete selection of place names than was presented on the first edition. Where there is disagreement between the gazetteer and the AMS 2 sheets, the names on the map should be considered more reliable.

In the gazetteer, location is indicated with geographical coordinates correct to the nearest minute and grid references to the sheets of (123) Korea, 1:250,000, AMS L551. In the extreme northeast, two sheets from (195) Manchuria, 1:500,000, AMS L401, were used for a small area not covered by 1:250,000 sheets at the time the gazetteer was prepared.

In addition to the grid references and geographical coordinates, the gazetteer identifies the type of features and indicates the province in which it is located.

Gazetteer entries are listed in strict alphabetical order without regard for breaks or the number of separate words making up a name. No distinction has been made among the Korean, Japanese, Chinese, and Russian languages, all of which are involved in the gazetteer.

A glossary of foreign generic terms appears on page iv of the introductory section.

Copies of this volume are available in quantity through the Map Library, Army Map Service.

(21) Place Name Index for Korea (Chōsen), 1943, 2nd edition, U.S. Army Map Service.

This index is unique in providing romanizations for both Japanese and Korean names along with Sino-Korean characters and Korean alphabet (onmun) spellings.

The names are keyed to an attached map, scale 1:1,500,000, which has only romanized Japanese readings. The Korean names are generally good, but the Japanese readings are not dependable and the scale of the map limited the number of names included.

Reference copies of this work are available in the Map Branch, CIA and in numerous other Washington libraries. Some distribution copies may be obtainable through the Map Library, Army Map Service.

(22) Map of Korea, 1:1,000,000, 1945, Korean Affairs Institute, Inc., Washington.

This useful booklet includes a gazetteer of 1300 entries with romanized names (McCuns-Reischauer system) keyed to a remarkably clear and legible thirteen sheet map of Korea scaled at 1:1,000,000.

In addition to the main sectional map, the volume includes a general map showing the location of Korea in the Eastern Hemisphere, a map of the provinces, a physiographic diagram, and an economic map.

Reference copies of this work are available in the Map Branch, CIA and numerous other libraries.

Usable black and white copies can be made.

(23) Map of Japan and Adjacent Regions, 1:2,000,000, 1937, Kokusai Bunka Shinkokai (The Society for International Cultural Relations), Tokyo.

This is an excellent general map covering Korea, Japan, Manchuria, and eastern China. Although the names are not large enough to be read at a distance, it still makes a useful wall map for illustrating Korea's situation in relation to nearby areas.

Relief is portrayed with shades of brown and green and many cultural features such as railroads, airlines, radio stations, lighthouses, mines, submarine cables,

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and sea routes, are shown. The classification of towns and cities in the Japanese Empire is based on figures for 1935-37.

The map is accompanied by a useful index in which romanized Korean place names (Hepburn system) are listed along with the place names of Japan in a single alphabetical sequence. Japanese characters are also given. Locations are indicated with grid references to the map.

Korean place names are found in index #1 titled "Japan". Names in eastern China and Manchuria are in index #2 titled "Manchukuo and the Eastern Part of China."

Reference copies of this map and the accompanying index are available in the Map Branch, CIA and in numerous other libraries.

(24) Sailing Directions for Siberia and Chosen, H. O. no. 122, 1932, United States Navy Department, Hydrographic Office.

This volume provides complete sailing directions covering the coasts of Korea and offshore islands. Navigational information is presented in a logically arranged sequence beginning at the Korea-USSR border and extending around the peninsula to the mouth of the Yalu River. The sailing directions are useful in interpreting hydrographic charts and other maps covering Korea's coastal areas.

In addition to the detailed navigational information, including data on weather, sea depths, distances, anchorages, etc., useful descriptions of ports, landing places, islands, points, and other coastal features are presented. Chapters VII and VIII deal with Korea.

The sailing directions include an alphabetical index of about 5,000 entries presenting romanized names from various sources. Names of places in Korea are indexed in the same sequence along with names from other areas. Locations are indicated with page references to the text where coordinates are given along with descriptive information and references to hydrographic charts.

These sailing directions and the U.S. Hydrographic Office charts to which they are closely related, (See (200) U.S. Hydrographic Charts 7), are useful locational aids and have considerable value as sources for alternate or variant names. However, the romanization, which includes some Korean and some Japanese readings, is unsystematic and there are inconsistencies between the charts and the sailing directions, especially for the east coast.

Distribution copies of this volume are available at the U.S. Hydrographic Office. Reference copies are available in the Map Branch, CIA and in numerous other libraries.

(25) Korea, 1:1,000,000, 1945, Joint Publishing Board.

This 28" x 46" single sheet map, on the modified polyconic projection of the International Map of the World, appears to be the best available plotting map covering all of Korea.

The map was prepared for use in preliminary work on the joint Army and Navy intelligence study on Korea (JANIS 75, April 1945). Like map (6) Areas Suitable for Bomber Airfields, 1:1,000,000, it is essentially a reproduction of (32) Eastern Asia, 1:1,000,000, AMS 5301.

In reprinting the map in one color (light blue), contours, roads, air navigation data, sea depths, and isogonic information were omitted. The name pattern, boundaries (province, international), railroads, hydrography, and spot heights were retained. Province names, with variants, were added. The map has full coordinate and linear scales in miles, kilometers, and nautical miles.

Distribution copies are available in the Map Branch, CIA.

(26) OSS Theater Map, 1:1,500,000, 1942, Office of Strategic Services.

This map provides complete coverage of the Eastern Hemisphere.

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It was designed primarily as an outline base map and prepared in such a way that any number of sheets may be joined to form a theater area of any size.

The map is suitable for plotting and the sheets can be assembled to serve as a wall map where coverage for Korea and adjacent areas is desired. However, the type sizes used for place names are not sufficiently large to permit reading at any great distance.

The sheets noted below cover Korea:

<u>OSS No.</u>	<u>Name</u>	<u>Index Reference Number</u>
1596	DAIREN	16E N.E.
1597	OSAKA	17E N.E.
1614	MUKDEN	16F N.E.
1615	VLADIVOSTOK	17F N.E.

This series was prepared on Lambert's conformal conic projection. Distance markers, in units of fifty statute miles, appear along a central meridian and a central parallel on each sheet.

Relief is shown with numbered, dot-line contours at varied intervals. Hydrography is portrayed in considerable detail but the cultural pattern (railroads, four classes of towns and cities, two classes of roads) is highly selected and is superimposed on the physical base to serve as a guide for the plotting of other data.

The worldwide coverage of this series is clearly illustrated on an excellent index map (CIA 2920) which also bears the title "OSS Theater Map".

Copies of the index map, the sheets covering Korea, and nearly all other sheets of the series, are available in quantity in the Map Branch, CIA.

(27) Korea, 1:1,000,000, Dec. 1944, U.S. Geological Survey, under direction of Aeronautical Chart Service, Army Air Forces, for Assistant Chief of Air Staff Intelligence.

This appears to be the best available single-sheet map showing Korean relief and drainage. It covers the entire country except for a small area in the extreme northeast.

Cultural information and place names are subordinated to the elevation data and hydrography. The map is suitable for plotting information related to relief.

The quite complete drainage pattern is portrayed in blue, while cultural information (railroads, two classes of roads, main towns) is presented in black. Relief is shown with bright plastic shading and spot heights in feet are given. Although the map lacks a legend, this is no serious drawback for the significance of the symbols is generally obvious.

This map has been prepared on the modified polyconic projection of the international map of the world. It has full coordinates. The marginal information includes a brief glossary of generic terms and linear scales in both miles and kilometers.

Copies are available in quantity through Headquarters, Aeronautical Chart Service, U.S. Air Forces. A limited number of distribution copies are available in the Map Branch, CIA.

(28) Surpluses and Deficits of Staple Food Production, 1:3,800,000, 28 Feb. '45, Office of Strategic Services (CIA 6154).

This is a rather complicated quantitative distribution map covering all of Korea. It brings out certain relationships between areas with adequate and inadequate food supplies.

Province boundaries are located and for each province "per capita caloric equivalent of all staple foods in terms of pounds of rice per annum" is shown

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with the application of four grades of distinctive shading keyed to surplus and deficit figures given in the legend.

Surplus or deficit figures appear in circles printed in or near each province. The size of each circle is proportional to a province's "aggregate caloric equivalent of all staple foods in terms of 1,000,000 pounds of rice per annum".

The data are based on combined averages (1933, 1934, 1936) of all staple foods available for consumption. Notes appearing on the map provide a detailed explanation of the statistical bases for the food surplus and deficit information.

Special boundaries delimit economic regions. Code letters identify areas where certain main food crops such as rice, wheat, soybeans, etc., are produced.

The map appears in JANIS 75. Copies are available in quantity in the Map Branch, CIA.

(29) Telecommunications, 1:2,000,000, 28 February 1945, Office of Strategic Services (CIA 6169).

This is a useful, single sheet, telecommunications map covering all of Korea. Although based on data assembled during the war, the map still presents a reasonably reliable generalized picture of Korea's telecommunications network.

Radio stations are located by symbol. Power of the stations is indicated in watts. Call letters are given, if known. Radio telegraph installations, radio telephone stations, radio direction finders, and a few unidentified radio installations are shown.

Telephone and telegraph lines are located but there is no way of determining whether a particular line is a telegraph or telephone line. Submarine telephone cables and submarine telegraph cables are located with distinctive symbols. Symbols also identify telephone repeater stations and telegraph or telephone offices. The data on repeater stations are incomplete. A special dotted line

shows "unconfirmed connecting routes to known telegraph and/or telephone land lines."

The approximate route of the Tokyo to Mukden buried cable, crossing Korea from Pusan to Sinuiju, is specially marked but telephone and telegraph lines paralleling this cable route are not shown. In addition to its information on electronic communications, the map presents international and provincial boundaries the hydrography pattern, and a fair selection of place names. No transportation data are given. To read the text the map must be held with East rather than North at the top of the sheet.

Distribution copies are available in the Map Branch, CIA. The map appears in JANIS 72.

(30) Korea Vegetation Regions, 1:4,200,000, 1943, U.S. War Department, Fig. 3 in "Survey of Korea".

This simple outline map covering all of Korea shows the drainage pattern and locates boundaries for ten main vegetation regions which are described in a marginal table.

The marginal explanations emphasize natural vegetation (main tree types are named) but some data on agriculture are included.

Principal towns are named and located but no political boundaries or transportation features are shown.

Reference copies of this map and a limited number of distribution copies are available in the Map Branch, CIA.

(31) Map of Korea Missions, 1:3,000,000, 1920, The Christian Literature Society of Korea, Seoul.

This map covers all of Korea using distinctive colors to illustrate the division of Korea into main mission zones. In most cases the nationality of the church is indicated.

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Marginal information includes a list of Protestant Christian churches operating missions in Korea. Churches acknowledging the divisions shown on this map are specially noted.

The map also shows province boundaries and the railroad net as it existed about 1920.

A reference copy is available in the Map Branch, CIA.

(32) Eastern Asia, 1:1,000,000, 1942-45, U.S. Army Map Service (AMS 5301).

Six sheets (NI-51, NI-52, NJ-51, NJ-52, NK-51, NK-52) of this extensive series pertain to Korea and provide complete coverage for the country. In effect these sheets amount to a useful general map presenting fairly reliable physical and cultural information at a medium scale. By bringing in adjacent sheets, the coverage can be conveniently extended to illustrate relationships between Korea and nearby countries.

This set was prepared on the modified polyconic projection of the International Map of the World and the sheets, covering 4° of latitude and 6° of longitude, follow the IMW sheet pattern. Each sheet has full coordinates and the margins are shaded at 5' intervals.

Relief is shown with contours and layer colors (green, yellow, and orange shades). Approximate contours are dotted and depression contours are specially marked. Spot heights are given in meters as are sea depths along some coastal areas. All sheets include submarine contours. Such features as marshes, ravines, cliffs, sand, escarpments and submerged reefs are located on some sheets. Unsurveyed streams are portrayed with dotted lines.

From three to five classes of towns and cities are located. Lighthouses and mine sites are shown on nearly all sheets. On sheet NK-51 the Suiho dam on the Yalu

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river is portrayed and the probable shoreline of the Suiho Reservoir is indicated.

The railroad information varies considerably from sheet to sheet but in most instances an indication is given as to whether railways are double or single track and broad or narrow gauge. Several sheets carry notes saying railway alignment is approximate -- only two sheets show railroad tunnels.

The road information is not detailed. On the two sheets covering the greater part of Korea, three classes of roads are shown in red. No data on width or surface are given.

Radio transmitting stations are located on all sheets with symbols appearing near town names. Three sheets show telegraph lines.

Aeronautical information includes the location of seaplane anchorages and from two to four classes of landing fields. On three sheets airfield names are indicated by underlining city names. Five of the six sheets include compass dials and isogonic information.

International and provincial boundaries are located. The marginal information appearing on all sheets includes an index to boundaries, an index to adjacent sheets, a brief glossary, a meters to feet conversion table, and linear scales in miles, kilometers, and nautical miles.

The Eastern Asia series was used as a source in preparation of other maps cited in this report [e.g. (25) Korea, 1:1,000,000; (6) Areas Suitable for Bomber Airfields, 1:1,000,000].

Copies of all sheets are available in quantity from the Army Map Service. Reference copies and a limited number of distribution copies are available in the Map Branch, CIA.

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(33) Chosenese Immigration Map of Manchouko, 1:9,000,000, 1938, originally appeared in the Sixth Report on Progress in Manchuria published by the South Manchurian Railway Company.

This is a small-scale nonquantitative distribution map covering Manchuria and northern Korea. Areas of concentrated Korean settlement in Manchuria are located and additional "subsidized-settlement" zones are shown.

Special symbols identify Korean farm-settlements, Man-Sen Development Company farm, Man-Sen Development lands, "concentration villages", and new subsidized settlements.

The map shows international boundaries, Manchurian province boundaries (circa 1938), and railroads. Within the limitations of the map's scale, the assortment of place names is quite complete. This cultural information aids greatly in oriunting the data on Korean colonization.

A reference copy is available in the Map Branch, CIA.

Usable black and white copies can be made.

(34) Korea, Agricultural Production and Communications, 1:4,300,000, June 1943, Department of State, Office of the Geographer, (CIA-Ge 991 E).

This map covers all of Korea and part of southeastern Manchuria.

It presents a good picture of land utilization in Korea by using distinctive colors to locate areas where forest land is dominant; areas where rice and barley are cultivated; and areas where millet, wheat, and beans are produced. The approximate northern limit of the double crop area is shown.

Airports (civil, military), seaplane anchorages, naval bases, and fortified zones are located.

The boundary for Chientao province, Manchuria, is depicted. A pie graph and population figures printed nearby show how the Koreans figure in the population of this border area.

Distribution copies of this map are available in the Map Branch, CIA.

(35) Korea, Vegetation and Terrain Regions, 1:1,900,000, April 1945, Joint Intelligence Studies Publishing Board, appears in Chapter I, JANIS 75.

On a base map showing relief (oblique shading), province boundaries, hydrography, and a fair selection of place names, distinctive coloring has been overprinted to locate five main vegetation types. These are:

- (a) Mixed Forest and Grasslands (trees named)
- (b) Broadleaf Deciduous Forests (trees named)
- (c) Cultivated Areas
- (d) Barren Areas
- (e) Marsh

The map text is oriented with East rather than North at the top of the sheet. Boundaries for main terrain regions and subregions are shown. Each division is marked with a letter or number keyed to a marginal table giving regional names.

Limited quantities of distribution copies are available in the Map Branch, CIA.

No usable black and white copies can be made.

(36) Korea, Slope, Terrain Regions and Routes, 1:1,900,000, April 1945, Joint Intelligence Studies Publishing Board, appears in Chapter I, JANIS 75.

This useful physical map shows clearly the relationships between terrain conditions and important land routes.

On a base map showing relief, province boundaries, hydrography, and a fair selection of place names, special coloring has been overprinted to indicate angles of slope.

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In the legend, the type of terrain represented by each of the three distinctive colors used, is described in considerable detail. A "slope graph" gives the angle of slope in degrees from the horizontal plane or in terms of percentage (assuming a 45° slope to equal 100%). Selected land routes (both road and railroad) are shown and those described in the JANIS text are differentiated.

Boundaries for main terrain regions and subregions are located. Each division is marked with a letter or number keyed to a marginal table giving regional names.

The map text is oriented with East rather than North at the top of the sheet.

A reference copy of the volume in which this map appears is available in the Map Branch, CIA, and in numerous other government offices.

No usable black and white copies can be made.

(37) Korea, Soil Trafficability Map, 1:2,100,000, April 1945, Joint Intelligence Studies Publishing Board, appears in Chapter I, JANIS 75.

This is a useful soil trafficability map covering all of Korea. International boundaries and main towns are located but no other cultural data are presented.

The soils of Korea are classified into eleven groups identified on the map with distinctive shading. A detailed legend gives type, texture, drainage and trafficability under varied climatic conditions for each group.

The map text is oriented with East rather than North at the top of the sheet.

A reference copy of the volume in which this map appears is available in the Map Branch, CIA.

Usable black and white copies can be made.

(38) Korea, Relief and Terrain Regions, 1:1,900,000, April 1945, Joint Intelligence Studies Publishing Board.

This is a useful physical map on which the ruggedness of the terrain is shown

with oblique shading and the elevation is illustrated with layer colors. Unlike many small-scale relief maps, it clearly brings out the fact that northeastern Korea is considerably higher than the rest of the country.

The map also shows province boundaries, hydrography, and a fair selection of place names.

Boundaries for main terrain regions and subregions are depicted. Each division is marked with a letter or number keyed to a marginal table giving regional names.

The map text is oriented with East rather than North at the top of the sheet.

Distribution copies are available in the Map Branch, CIA. The map appears in JANIS 75.

No usable black and white copies can be made.

(39) The Japanese Shipping Position for 1942, 1:23,000,000, Aug. 8, 1942, Board of Economic Warfare and Office of Strategic Services (CIA 826).

This is a small-scale trade map covering all of Eastern Asia. It effectively illustrates the position of Korea in Japan's wartime trade.

Lines are used to illustrate the flow of Japanese seaborne commerce; their relative thickness is proportional to the volume of trade. The value of any given line, in terms of thousands of tons, can be determined by checking with a "scale of flowlines" appearing in the legend. Principal commodities shipped to Japan from each port are named.

Distribution copies of this map are available in the Map Branch, CIA.

(40) Land Utilization In Japan, 1:3,700,000, 25 Sept. 1942, Board of Economic Warfare and Office of Strategic Services (CIA 819).

This simplified monochrome, land utilization map covers Korea, Japan, and Formosa.

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Distinctive circular symbols are used to identify: open uncultivated land, forest, pasture, tea growing areas, mulberry cultivation, upland fields, rice paddies, and orchards. Light dotted lines locate the more important land use boundaries. A heavier line is used to show boundaries between major agricultural regions. The agricultural regions are marked with numbers keyed to a marginal table giving the regional name and the major characteristics of the area's land use pattern.

Main cities, province boundaries, and fortified zones are located.

Distribution copies of this map are available in the Map Branch, CIA.

(41) Water Supply and Sewerage of Korea, Strategic Engineering Study No. 155, prepared by the Engineer Research Office for the Strategic Intelligence Branch, Military Intelligence Division; Office, Chief of Engineers, U. S. Army; reproduced by Army Map Service.

This useful, thirty-five page, engineering study was prepared during the war from official intelligence sources and from information collected, primarily, in New York City libraries. Most of the source materials were published or assembled prior to 1939.

Seven maps are included in the study and these are noted below by page number, title and scale. Brief descriptive remarks are also given.

Page 4, Water Supply of Korea, 1:1,500,000

For general use, this is the most important map in the report. It covers all of Korea using conspicuous symbols to locate cities having water supply systems. Notes keyed to the map provide a brief resume of the known facts regarding each city water system. Mineral springs are also located by symbol and an inset shows province boundaries.

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Page 11, Plan of Chinkai Naval Base Showing Location of Service Reservoir of Water Supply, 1:27,000

A sketchy plan pinpointing a reservoir and a few additional installations.

Page 21, Plan of Fusan Showing One Impounding Reservoir and the Distribution Reservoir, 1:21,500

A fairly complete city plan on which three reservoirs are specially marked.

Page 23, Plan of Gunzan Showing Location of Water Supply Pipe Line, 1:16,000.

A reproduction of a sketchy Japanese plan. One important pipeline and one reservoir are noted.

Page 27, City Plan of Heijo Showing Location of Waterworks, 1:20,000

A fairly complete city plan on which a purification plant, a conduit bridge, and one reservoir are especially marked.

Page 31, City Plan of Jinsen Showing Water Distribution Reservoir, 1:19,000

A reproduction of a Japanese plan. One reservoir is noted.

Page 34, City of Keijo Showing Location of City Water Reservoir East of City, 1:30,000

A reduced reproduction of a Japanese plan. One important reservoir is located.

The volume also contains extensive tables providing data on public water supplies, mineral springs, and city sewerage systems. Photographs of filtering plants, reservoirs, and other water supply features are included.

Reference copies of this study are available in the Map Branch, CIA, in Reference, Department of State, and in other government offices.

(42) Korea Water Supply and Sewerage Systems, 1:2,000,000, 28 Feb. 1945, Office of Strategic Services, (CIA 6142).

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This is one of the best available English text, water-supply maps covering all of Korea.

The stream pattern is in blue. Symbols locate water-works (data incomplete), sewerage systems, dams and springs. Hot and cold springs are differentiated. A special boundary delimits areas where springs are concentrated.

Province boundaries and a good selection of town and transportation information is presented.

Distribution copies of this map are available in the Map Branch, CIA. The map appears in JANIS 75.

(43) Kyongsong (Seoul, Keijo) and Inch'on (Chemulpo, Jinsen) Water Supply Sketch Map, 1:47,000, 5 February 1945, Office of Strategic Services (CIA 3583).

This is a simple sketch map covering Kyongsong (Seoul, Keijo) and environs. It locates the Kyongsong Waterworks, the distribution reservoir east of the city, and the principal water mains in the urban area. Pipe diameter in inches is given for the various water mains.

Railroads in the Kyongsong area are depicted but no street or building details are shown.

The Inch'on (Jinsen) waterworks (18 miles from the city of Inch'on) is located and pipe connections with the Kyongsong system are portrayed.

Distribution copies of this map are available in the Map Branch, CIA. The map appears in JANIS 75.

(44) Fusen-Chōshin Power Development, 1:120,000, June 1945, compiled by the U.S. Coast and Geodetic Survey for the Aeronautical Chart Service, U.S. Army; reproduced by Army Map Service.

This is a detailed, single sheet, topographical map covering a large portion of Hamyong-namdo province in northern Korea. The coverage is centered at $40^{\circ}20'N.$, $127^{\circ}30'E.$

The map was specially prepared to illustrate the system of power lines, power plants, dams and reservoirs of the Fusen-Changjin (Chōshin) power development. Although it was carefully compiled in 1945, from the best available sources, locations in connection with the power development are approximate.

The cultural data are quite complete. Province and kun boundaries are shown and a fairly complete selection of town and village names is presented. Roads (primary, secondary, trails) and railroads (4'8 $\frac{1}{2}$ " gauge, single track; light railroad; cable railroad; aerial cableway) are located. High tension power lines, pressure pipelines, vertical shafts, and mines are identified by symbol.

Contours, copied primarily from the 1:50,000 topographical map of Korea, are shown in brown at 50 meter intervals. Triangulation points and numerous spot heights in meters are given. Land utilization is indicated with shading and symbols (blue and green) identifying woodland, grassland, and rice growing areas.

Distribution copies are available in quantity through Headquarters, Aeronautical Chart Service and the Map Library, Army Map Service. A limited number of distribution copies are available in the Map Branch, CIA.

(45) Highways in Korea, 1:3,000,000, 25 July 1942, Office of Strategic Services (CIA 744).

This is a small-scale base map showing Korea's road net (three classes of roads), main towns, and province boundaries. The map measures 13" x 15" and is suitable for illustrating reports and plotting data bearing a close relation to the road pattern.

Distribution copies are available from the Map Branch, CIA.

RESTRICTED

(46) Korea, Major Chemical Plants, 1:3,500,000, 12 Feb. 1945, Office of Strategic Services (CIA 6126).

This useful, small-scale map covers all of Korea and shows the distribution of major chemical plants.

Ten distinctive symbols are used to identify plants producing particular chemicals or plants engaged in particular types of processing.

Province boundaries are located but only cities or towns having chemical industries are named.

Distribution copies of this map are available in the Map Branch, CIA.

(47) Korea Industrial Concentration 1944, 1:4,000,000, 28 February 1945, Office of Strategic Services (CIA 6140)

This useful map covers all of Korea and provides an effective though highly generalized picture of the distribution of industry.

The degree of industrialization in each province is indicated with four grades of distinctive shading. Code letters appearing near provinces identify the political units industries.

Distinctive city symbols are used to locate "Cities of some industrial importance".

Copies are available in quantity in the Map Branch, CIA.

(48) Korea, Machinery and Railway Equipment Manufacturing Centers and Shipyards, 1:3,800,000, 10 February 1945, Office of Strategic Services (CIA 6111).

This useful economic map, based primarily on 1940 data, covers all of Korea. Distinctive symbols are used to identify areas where machinery and railway equipment are manufactured. Only important plants are noted and, if a locality has more than one plant of a particular type, the appropriate symbol is repeated.

Shipyards are located by symbols with large and small yards differentiated.

Province boundaries are shown but only cities and towns prominent in the industrial picture are named.

Copies are available in quantity in the Map Branch, CIA.

(49) Distribution of Population in Korea, 1:2,250,000, 15 August 1945, Office of Strategic Services (CIA X-588)

This crude population map covering all of Korea is mentioned only because distribution copies are readily available.

The map was originally prepared as a dot distribution map with each dot representing 200 persons; however, on the available photo-offset reproductions, the dots have become so fused that their statistical values cannot be interpreted. As a result, the map's portrayal of population distribution is crude and somewhat deceiving. Data are of 1938.

To (province) boundaries are located and province names (Japanese forms) are overprinted in such a way that they detract from the clarity of the population data. A few important cities are named.

Copies are available in quantity in the Map Branch, CIA.

(50) Korea, Aircraft, Motor Vehicles, and Munitions Plants, 1:3,900,000, 29 Feb. 1945, Office of Strategic Services (CIA 6112).

This is a simple economic map covering all of Korea. Distinctive symbols are used to identify areas where aircraft, motor vehicles and munitions are or were produced. Only important plants are noted and if a locality has more than one plant of a particular type, the appropriated symbol is repeated.

Province boundaries are shown but only towns prominent in the industrial picture are named.

Copies are available in quantity in the Map Branch, CIA.

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(51) Map of Producing Mines in Korea, 1:1,000,000, Dec. 1935, Korea Mining Association, Seoul (Japanese text).

This appears to be the best available mineral map covering all of Korea. Exploited minerals are identified and the distribution of mine sites is vividly shown against a complete background of cultural information. The text is in Japanese but many key names are romanized and some of the production statistics are given in Arabic numerals.

The mineral information is presented with vari-colored symbols printed near producing sites. The size of the symbols is proportional to the volume of production. Figures appearing near the symbols indicate volume or value of production.

The legend provides symbols for each of the following:

nickel	alum shale
alunite	arsenic
mercury	iron sulphide
barytes	amorphous graphite
asbestos	scaly graphite
agalmatolite	bituminous coal
fluorite	anthracite coal
molybdenum	iron ore
tungsten	copper
mica	zinc
magnesite	alluvial gold
silica	gold-silver ore

Marginal graphs and statistical tables indicate "value of production" and "number of mines in operation".

The background cultural information is quite complete. Province and kun (gun) boundaries and capitals are located. Towns (4 classes), railroads (2 classes), and roads (2 classes) are shown. Ports, lighthouses, and post offices are identified.

The physical information includes spot heights, submarine contours, and mineral springs.

Reference copies (color photo) are available in the Map Branch, CIA.

(52) Manchuria ("Manchukuo") Number of Koreans, 1:4,500,000, August 1946, Department of State, Division of Map Intelligence and Cartography (CIA 10486).

This is a fair population map covering northern Korea and all of Manchuria. It provides an effective, though highly generalized, picture of the distribution of Koreans in Manchuria. Unfortunately, no indication is given of the percentage of Koreans in the total population.

The population data are from statistics appearing in the 1942 Manchukuo Yearbook. The information is presented graphically by marking each Manchukuoan province with distinctive shading. The five shades used represent: (less than 10,000; 10,000-50,000; 50,000-100,000; 100,000-150,000; and over 150,000.)

The map shows international and Manchukuoan (Japanese) province boundaries. Railroads (2 classes) are located and main towns are named.

Distribution copies are available in the Map Branch, CIA.

(53) Minor Oil Facilities of Korea (With Related Transportation), 1:3,900,000, 26, Feb. 1945, Foreign Economic Administration (CIA-FEA 1910M).

This is a simple distribution map covering all of Korea. Distinctive symbols are used to locate oil storage facilities. "Bulk and packaged oil depots" and "packaged oil warehouses" are differentiated.

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Railroads (4 classes) and roads (2 classes) are portrayed in considerable detail. Province boundaries are located.

Distribution copies are available in the Map Branch, CIA.

(54) Korea Distribution of Electric Power Plants, 1:2,000,000, 28 February 1945, Office of Strategic Services (CIA 5982).

This is one of the best available maps dealing with power plants in Korea. It covers the entire country and, although based on data assembled during the war, it still presents a reasonably reliable picture of the distribution of electric power plants.

Power producing installations are located with symbols distinctively colored to differentiate thermoelectric from hydroelectric plants. Variations in the shape of the symbols indicate power output (1,000-9,999 kw.; 10,000-49,999 kw.; 50,000-99,999 kw.; 100,000kw. and over). More detailed data on the output of each plant is offered by an accompanying table in which plants are named and their precise or estimated capacity in kw. is given. Numbers appearing beside plant symbols on the map are keyed to this table.

Some plant locations are doubtful; this is indicated on the map with notes near the presumed sites.

The text has been printed with East rather than North at the top of the sheet.

Province boundaries are located and the hydrography pattern is portrayed in considerable detail. Only towns and cities near power plants are named.

Distribution copies are available in the Map Branch, CIA. The map appears in JANIS 75.

(55) Koreans in Manchuria, 1:8,500,000, July 1945, prepared in the Department of State, Division of Geography and Cartography (CIA-Ge 1732E).

Two maps, both covering all of Manchuria and northern Korea, appear under one title. The first shows "Koreans by province, October 1, 1940" and the second indicates "Koreans in Cities over 100,000, August 31, 1941".

On the first map, Manchukuoan (Japanese) province boundaries are located and a graphic circle device, proportional in size to the number of Koreans in the area, is printed in each province. A marginal table gives the number of Koreans in each province (1940-41).

The second map is the same as the first except that the graphic circles and other data pertain to the populations of major cities instead of provinces.

Distribution copies are available in the Map Branch, CIA.

(56) Korea Administrative Divisions, 1:2,000,000, 3 March 1945, Office of Strategic Services (CIA 6156).

For general reference, where highly detailed boundary information is not needed, this map appears to be the best readily available English text map showing province, kun, and pu boundaries in Korea. It covers the whole country.

Province boundaries are portrayed with a conspicuous red line and kun boundaries are located in grey. The boundaries of pu are also in grey but these especial municipalities are colored solid red. The areal extent of up class towns could not be shown on a map at this scale and such communities are located with a conventional sign.

The national capital, provincial capitals, and kun seats are identified by symbol. The squares, circles, and triangles used to locate capitals have been planned so that they can be superimposed one on the other without detracting from the clarity of any individual symbol. Where a particular city is the capital of more than one administrative unit, this fact is clearly indicated in a minimum amount of space.

Distribution copies of this map are available in the Map Branch, CIA. The map appears in JANIS 75.

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(57) Breakdown of the Standard Vacuum Oil Co. in Japan and Korea, various scales, 1927-38, document assembled 1-28-42, Standard Vacuum Oil Co.

This document comprises a series of detailed sketches, city plans, and diagrams covering all Standard Vacuum Oil Co. properties and installations in Japan and Korea. Sixty of the plans pertain to Korea and portray installations in nearly all major Korean cities.

Precise property dimensions are given and most plans carry notes indicating whether the property was leased or owned. Preparation and revision dates are given on each map or diagram.

A reference copy (negative photostat) is available in Reference, Department of State (call number: FEA 165344).

Usable black and white copies can be made.

(58) Weather and Climate of Tsushima Island and Surrounding Strait, Nov. 1943, Weather Information Branch, Headquarters, Army Air Forces (Report #593).

This useful summary offers maps and other climatic data pertinent to all of Korea. Southeastern Korea and the Tsushima Strait area are given special attention and the suitability of weather conditions for bombing operations is emphasized.

The maps appearing in the study can be divided into two main groups:

(a) Maps covering Korea, Japan, and adjacent areas. These maps, scaled at 1:40,000,000, show cold air flow, warm air flow, cold fronts, warm fronts, and occluded fronts. Atmospheric pressure is given in millibars. Each map portrays typical conditions during certain seasons. The titles are as follows:

Fig. 2, Winter Type -- Good Weather

Fig. 3, Winter Type -- Bad Weather

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Fig. 5, Summer Type -- Fair Weather

Fig. 8, Spring and Autumn Type -- Variable Weather.

(b) Maps covering southeastern Korea and the Tsushima Strait area.

All of these maps are scaled at 1:2,300,000. The titles, accompanied by brief descriptions, are as follows:

Fig. 1, Map of Topography Showing Location of Stations.

A simple sketch showing relief with layer shading. Six weather stations are located.

Fig. 4, Average Precipitation, Cloudiness, Ocean Currents for January.

Shows average precipitation with distinctive shading. Cloudiness is illustrated with graphs appearing near weather stations sites. Flow of ocean currents is depicted with arrows and warm and cold currents are differentiated.

Fig. 6, Average Precipitation, Cloudiness and Ocean Currents for July.

Same as the map above with reference to a typical situation for July.

Fig. 7, Number of Days with Precipitation.

Number of days with precipitation is indicated on small graphs appearing near each weather station.

The summary includes a brief discussion of weather controls, topography in relation to weather, sea currents, typical conditions during the various seasons, and bombing weather. Several statistical tables are presented.

Distribution copies of this report are available through the Weather Information Branch, Headquarters, U.S. Air Forces. A reference copy is available in the Map Branch, CIA.

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(59) Commercial Fertilizer Plants in Korea, 1:4,000,000, 6 May 1946, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers (Fig. 1 in "Commercial Fertilizers in Korea", Report No. 33).

This is a simple outline map covering all of Korea. Province boundaries are located and the distribution of commercial fertilizer plants is shown with distinctive symbols.

Plants producing phosphatic, nitrogenous, and organic fertilizers are differentiated. The map does not include data on organic fertilizer plants north of the 38th parallel.

Reference copies of the report in which this map appears are available in Reference, Department of State and in the Map Branch, CIA.

The map will yield usable black and white reproductions.

(60) Korea Mission, 1:300,000, 1930, Foreign Missions Committee, Presbyterian Church, USA, Nashville, Tenn.

This map covers southwestern Korea. Distinctive symbols are used to locate various types of mission stations and other places where Christian services were held. An inset shows the division of Korea into Missionary Zones agreed upon by the Presbyterian and Methodist Churches.

A reference copy is available in the Division of Maps, Library of Congress.

Black and white copies of limited usefulness can be made.

(61) Korea, Iron and Steel Industry, 1:3,800,000, Feb. 1945, Office of Strategic Services (CIA 6137).

This map covers all of Korea offering fairly detailed data on iron and steel producing installations and ferroalloy ore mines.

Iron and steel production centers are located with symbols and the estimated 1944 plant capacity is indicated in metric tons. Some of the plant locations are approximate.

The legend includes inadequately interpreted data on "integration of iron and steel plants".

Ferro-alloy ore mines (nickel, molybdenum, cobalt, vanadium, manganese, tungsten, chromium) are located with distinctive symbols. Symbols are also provided for iron ore mines and coke oven plants.

Province boundaries are located but only towns and cities connected with the mineral or industrial information are named.

Distribution copies are available in the Map Branch, CIA. The map appears in JANIS 75.

(62) Korea, Coal and Petroleum, 1:3,800,000, Feb. 1945, Office of Strategic Service (CIA 6139).

This is a simple distribution map covering all of Korea. It locates coal fields, coke ovens, and petroleum processing plants.

Twenty-three coalfields are located and named. Figures appearing after names indicate the number of mines in each coalfield. Coke ovens, synthetic petroleum plants, and petroleum refineries are identified only by symbol. No indication is given as to the volume of coal, coke, or petroleum produced or processed.

Province boundaries are portrayed and selected towns and cities are located. The main railway net is also shown.

Distribution copies are available in the Map Branch, CIA. The map appears in JANIS 75.

(63) Korea, Plants Producing Construction Materials, 1:3,800,000, February 1945, Office of Strategic Services (CIA 6136).

This distribution map covering all of Korea locates cement plants, structural steel plants, brick and tile plants, in addition to plants producing building stone and other construction materials.

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Production centers are shown with distinctive symbols. If more than one plant of a particular type is located at or near a city, this is signified by repeating the appropriate symbol. No indication is given as to the volume of building material produced.

Province boundaries are located but only towns and cities connected with the industrial information are named.

Distribution copies are available in the Map Branch, CIA.

(64) Korea Non-Ferrous Metals and Non-Metallic Minerals, 1:2,000,000, Feb. 1945, Office of Strategic Services (CIA 6110).

This map covers all of Korea locating mines and refineries producing or processing non-ferrous metals and non-metallic minerals.

Mines, refineries, smelters, and processing plants are located with distinctive symbols in which are printed letters identifying the following metals or minerals:

asbestos	copper	magnesium
alunite	fluorite	mica
alumina	graphite	lead
aluminum	mercury	antimony
aluminous shale	manganese	zinc

When the location of an installation is uncertain this is indicated by printing the symbol with a dotted line. The map provides no information on the volume of production at mines and processing plants.

Province boundaries are portrayed but only cities and towns connected with the mineral and metal information are named.

The map title is printed with East rather than North at the top of the sheet.

Distribution copies are available in the Map Branch, CIA. This map appears in JANIS 75.

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(65) Suiho Dam and Environs (Yalu River), 1:25,000, Nov. 1943, Target Research, Army Map Service (Text in Japanese and English).

This map shows the probable shoreline of the lower portion of the Suiho Reservoir on the Yalu River.

It was prepared by joining and enlarging various sheets of the Korea 1:50,000 series and a Manchuria set scaled at 1:100,000. On this base, the dam, the power house, the shoreline of the reservoir, and certain railroads have been interpolated.

The alignment of the main railroad crossing the dam is approximate and the location of buildings and other cultural features near the dam is not entirely reliable.

A limited number of distribution copies are available in the Map Branch, CIA.

(66) Korea: Primary Centers of Industry, Power, and Mines, 1:3,000,000, 9 October 1942, Office of Strategic Services (CIA 992).

This is an effective economic map covering all of Korea. Industrial plants, electric power installations, mines, and mineral processing centers are located.

The map offers data on some phases of Korea's economy that are not covered as well on other available maps. However, it is based on data assembled during the early years of the war and presents a picture of Korea's economy which is not entirely reliable.

Symbols show the distribution of the following industries:

iron and steel	petroleum
aluminum and/or magnesium	cement
chemicals and munitions	textile
aircraft and transport	general manufactures

Dams, hydroelectric plants, thermoelectric plants, and power transmission lines are located. An indication is given as to whether dams and power plants were (as of 1942) in operation or incomplete.

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Mines are located with uniform symbols; letters appearing in the symbols identify the exploited mineral (e.g. gold, coal, iron, copper, alunite, magnesite, tungsten, molybdenum, zinc, nickel, and graphite).

The map provides no indication as to the volume of production at the various mines and plants.

Province boundaries are located and a fair selection of place names is presented.

Distribution copies are available in the Map Branch, CIA.

(67) Choshin-Fusen Hydraulic Power Plants and Konan Nitrogen Fertilizer Plant in Korea, n.s., n.d., Map #5 in Survey of Korea, U.S. War Department, 1943.

This is an oblique panorama sketch covering the main industrial installations at Hungnam (Konan).

In addition to locating main plants, docks, building, etc., it provides a sketchy portrayal of the power lines running from this power producing area to other cities in northern Korea.

The panorama has no true scale and the size of the Hungnam industrial area has been deliberately exaggerated. Relief is indicated with plastic shading.

This view originally appeared in a Japanese publication. After an English text was added, it was reproduced (photocopy) in 1943 for inclusion in the U.S. War Department report Survey of Korea. It was also reproduced (photo-offset) for inclusion in Strategic Engineering Study #157, Electric Power of Korea, item (198) in this report.

A limited number of distribution copies are available in the Map Branch, CIA.

(68) A Climatic Summary of Korea, June 1944, Aerology Section, Chief of Naval Operations.

This is a brief but highly effective climate summary covering all of Korea. It presents a picture of the country's weather and climate which is about as complete and reliable as available source information permits.

The report is based primarily on the records of from 15 to 17 major Korean weather observatories. Supplementary data from a hundred or more minor weather stations have also been used.

The twenty-four simple outline maps included in the study are devoted exclusively to the climate and weather information indicated in their titles.

Figure numbers and titles are given below along with brief descriptions.

Fig. 2, Surface Wind Roses, Winter, 1:5,000,000.

Locates fourteen well distributed wind diagrams which graphically illustrate the percentage of the winter season during which the wind blows from various directions. Figures in the centers of the wind roses indicate the percentage of calms.

Fig. 3, Mean Monthly Distribution of Precipitation (inches), 1:5,000,000.

Lines delimit areas having equal precipitation during January. Weather stations are located.

Fig. 4, Distribution of Mean Temperature (°F), 1:5,000,000.

Lines delimit areas having equal mean temperature during January.

Fig. 5, (wind roses; same as Fig. 2, for Spring)

Fig. 6, (precipitation; same as Fig. 3, for April)

Fig. 7, (wind roses; same as Figures 2 and 5, for Summer)

Fig. 8, (precipitation; same as Figures 3 and 6, for July)

Fig. 9, (temperature; same as Figure 4, for August)

Fig. 10, (wind roses; same as Figures 2, 5, and 7, for Autumn)

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Fig. 11, (precipitation; same as Figures 3, 6, and 8 for October.

Fig. 19, Soil Trafficability Map, 1:6,000,000.

A highly generalized map; distinctive shading located four soil types.

Descriptions of each type are given in the legend along with data on trafficability under varying weather conditions.

Figures 26-37, Charts of Monthly Weather Conditions, 1:5,000,000.

This series includes a map for each month. On each map small boxes appearing near weather stations give average temperature in degrees Fahrenheit, average precipitation in inches, prevailing wind direction, cloud cover, days with precipitation and average wind velocity in miles per hour.

Figure 38, Station Location Map, 1:5,000,000.

Names and locates fifteen weather stations. In addition to the above noted maps, the report presents a well-organized general discussion of Korea's climate conditions in relation to air operations, various graphs, and numerous statistical tables.

Distribution copies are obtainable through the Aerology Section, Chief of Naval Operations. A reference copy is available in the Map Branch, CIA.

(69) Tobacco Map of Japan, 1:1,500,000, 1936, Kyodo Tobacco Co., Ltd., Tokyo (English text).

This is a distribution map covering the former Japanese Empire. Korea is shown on a 1:2,500,000 inset.

Cultivation zones for different varieties of tobacco are located with distinctive coloring. Numbers, superimposed in color, denote and various types to a detailed legend where the names of major varieties and sub-types are given. The map provides no information on the volume of tobacco produced.

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On the Korean inset, previous boundaries are located and main towns are named.

A reference copy of this map is available in the Map Branch, CIA.

No usable black and white copies can be made.

(70) Kyongsong or Seoul (Keijo), 1:12,500,000, March 1946, Army Map Service (AMS L951, 1st Edition, AMS-1)

This map appears to be the best available city plan covering Korea's capital. It is in effect a detailed topographical map presenting a complete assortment of physical and cultural information pertaining to the city and environs. Although it does not record recent changes in the function of certain buildings and installations, the map still presents a remarkably complete and reliable portrayal of this important city.

The plan has been carefully compiled from the best available Japanese maps. Air photographs and intelligence reports were also used as sources. The marginal data include a diagram indicating the sources used in preparing particular sections of the map.

Prominent buildings and installations are identified by name or function and precise building outlines are shown. Residential or semi-residential areas are indicated with two shades of yellow distinguishing sparsely built-up areas from densely built-up areas.

The transportation pattern is presented in considerable detail; primary roads, other roads, and trails are identified. Railroads (4'8 $\frac{1}{2}$ " gauge; single track, double track) and tramways are shown.

The map also presents information on the miscellaneous cultural features listed below:

water supply facilities	temples
railroad shop and service installations	shrines

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police stations	cemeteries
high tension power lines	military installations
schools	prisons
hospitals	banks

Relief is shown with contours at 10 meter intervals. Dikes and other embankments are hachured. Precipitous slopes are specially marked and spot heights are given in meters.

Hydrography is quite fully represented. In addition to the main streams, wells, ponds, canals and irrigation ditches are shown.

Considerable land utilization information is presented. Woodland, grass-land, rice growing areas and orchards are vividly portrayed.

A unique feature of this map is its detailed (1943) data on city administrative units. Names of these zones are listed on the reverse side in an alphabetical index presenting both Korean and Japanese pronunciation. Grid references and key numbers identify the names on the map.

The marginal data include linear scales in miles, meters, and yards. Isogonic information (1946) and a brief glossary are presented along with the previously mentioned data on compilation sources.

Copies are available in quantity at the Map Library, Army Map Service. Limited quantities are available in the Map Branch, CIA.

(71) P'yongyang (Heijo), 1:12,500, October 1946, Army Map Service (AMS L951, 1st. ed. AMS 1).

This appears to be the best available plan covering P'yongyang. It is in effect a detailed topographical map presenting a complete assortment of physical and cultural information pertaining to the city and a portion of its environs.

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The map was compiled from Japanese maps, U.S. air photographs, and intelligence reports. The marginal data include a diagram indicating the sources used in preparing particular sections. The data presented are reasonably complete and reliable.

Prominent buildings and installations are identified by name or function and precise building outlines are shown. Residential and semi-residential areas are indicated with shading. Shade variations distinguish sparsely built-up areas from densely built-up areas.

The transportation pattern is presented in considerable detail. Primary roads, rural roads, city streets, and trails, are identified. Railroads (4'8 $\frac{1}{2}$ " gauge; single track, double track 3'6", single track) and tramways are shown. Wood and steel bridges are distinguished.

The map also provides information on the cultural features listed below.

water supply facilities	post offices
railroad service installations	temples
police stations	shrines
high tension power lines	cemeteries
schools	military installations
hospitals	

Relief is depicted with contours at 10 meter intervals. Dikes and embankments are hachured.

Hydrography is quite fully represented. In addition to the main streams, wells, ponds, canals, and irrigation ditches are shown. For the main river flowing through the city (the Taedong-Gang), soundings are given in fathoms.

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The Jido Navy coal mine region, a few miles east of the city, is portrayed on a sketchy (1:62,500) inset.

Land utilization information is quite detailed. Woodlands, grassland, and cultivated areas, are vividly shown. Rice growing fields are differentiated from other agricultural areas.

The marginal data include linear scales in miles, meters, and yards. Isogonic information (1946) and a brief glossary are presented along with the previously mentioned data on compilation sources.

Copies are available in quantity at the Map Library, Army Map Service. Limited quantities are available in the Map Branch, CIA.

(72) Heijo, Korea, 1:11,500, date of photography: 13 Dec. 1944, Air Photo Mosaic, no publisher or authority.

This is a fairly clear air photo mosaic covering the Sadong coal mines and industrial areas a few miles east of P'yongyang. Only a small part of the city proper is covered but the mosaic takes in areas that are not shown on map (71) P'yongyang (Heijo).

A reference copy is available in the Map Branch, CIA.

(73) Pusan (Fusan), 1:12,500, July 1946, Army Map Service (AMS L951, 1st ed., AMS 1).

This appears to be the best available plan covering Pusan. It is in effect a fairly detailed topographical map presenting a complete assortment of physical and cultural information pertaining to this important port.

The plan was compiled largely from air photographs and hydrographic charts. The marginal data include a diagram indicating the sources used in preparing particular sections.

Most of the prominent buildings and installations are identified by name or function and precise building outlines are shown. Residential and semi-residential areas are indicated with shading. Shade variations distinguish sparsely built-up areas from densely built-up areas.

The transportation pattern is presented in considerable detail. Primary roads, suburban roads, and trails are identified. Railroads (4'8 $\frac{1}{2}$ " gauge; single track, double track; narrow gauge) and tramways are shown.

The map also provides information on the cultural features listed below.

water supply facilities	temples
railroad service installations	cemeteries
police stations	military installations
schools	hospitals

Relief is depicted with form lines. Dikes and embankments are hachured and spot heights are given in meters.

In addition to the main streams; reservoirs, canals, and irrigation ditches are shown. Sea depths are given in fathoms.

Land utilization information is fairly detailed. Woodlands, grasslands, and rice growing areas are shown.

The marginal data include linear scales in miles, meters, and yards. Isogonic information (1946) and a brief glossary are presented along with the previously mentioned data on compilation sources. A meters to feet conversion table is also presented.

Copies are available in quantity at the Map Library, Army Map Service. A limited number of distribution copies are available in the Map Branch, CIA.

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(74) Town Plan of Pusan (Fusan), 1:27,000, 28 Feb. 1945, Office of Strategic Services (CIA 6141).

This simple outline plan of Pusan is included in this analysis because it is readily available and because it is highly suitable for illustrating reports. The sheet measures 10" x 12".

This small-scale plan is by no means as detailed or complete as map (73) Pusan (Fusan); however, the information presented is generally reliable. Air photos were one of the principal compilation sources.

Main streets are clearly located and many of the more important installations are identified by name or function. Warehouses, industrial areas and military areas are specially colored and stand out vividly. The terrain of the surrounding country is not portrayed.

Distribution copies are available in the Map Branch, CIA. The plan appears in JANIS 75.

(75) Fusan, Korea, 1:17,000, Date of Photography; 17 Nov. 1944, no publisher or authority.

This is a very clear air photo mosaic covering Pusan's harbor, docks, industrial area, and a portion of the city proper. It supplements the data appearing on map (73) Pusan (Fusan) and provides a vivid picture of land utilization.

A reference copy is available in the Map Branch, CIA.

(76) Ch'ongjin (Seishin), 1:12,500, July 1946, Army Map Service (AMS L951, 1st ed., AMS 1).

This appears to be the best available plan covering Ch'ongjin. It is in effect a detailed topographical map presenting a complete assortment of physical and cultural information pertaining to the city.

Although only "probable sites" are given for certain buildings and installations, the map still presents a remarkably complete and effective portrayal of this important port.

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The plan has been compiled from some of the best available Japanese topographical maps. Hydrographic charts, air photographs, and intelligence reports were also used as sources. The marginal data include a diagram indicating what sources were used in preparing particular sections of the map.

Many prominent buildings and installations are identified by name or function and precise building outlines are often shown. Residential and semi-residential areas are indicated with shading. Shade variations distinguish sparsely built-up areas from densely built-up areas.

The transportation pattern is presented in considerable detail. Primary roads, secondary roads, and trails are identified. Railroads (4'8 $\frac{1}{2}$ " gauge; single track, double track; 3'6" gauge, single track) and tramways are shown.

The map also provides information on the cultural features listed below:

air fields	prisons
railroad service	military
installations	installations
schools	hospitals
police stations	high tension power lines
banks	

Relief is depicted with contours at 10 meter intervals and numerous spot heights in meters are presented. Dikes and embankments are hachured. Precipitous slopes are specially marked.

Hydrography is quite fully represented. In addition to the main streams; ponds, canals, and irrigation ditches are shown. Sea depths are given in meters.

The land utilization information is quite detailed. Woodland, grass-land and rice growing areas are vividly shown.

The marginal data include linear scales in miles, meters and yards. Isogonic information (1946) and a brief glossary are presented along with the previously mentioned data on compilation sources.

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Copies are available in quantity at the Map Library, Army Map Service.

Limited quantities are available in the Map Branch, CIA.

(77) Ch'ongjin (Seishin), Korea, 1:21,500, 1945-?, Office of Strategic Services (CIA X-646.4).

This simple outline plan of Ch'ongjin is included in this analysis because it is readily available and because it is highly suitable for illustrating reports.

The sheet measures 12" x 22".

This plan is by no means as detailed or complete as map (76) Chongjin (Seishin), 1:12,500; however, the main features are located accurately and a very small area not portrayed on map (76) is covered.

The principal streets are clearly shown and a few important installations are identified by name or function. The railroad net, printed in red, stands out vividly.

Sea depths are given in feet but relief is not indicated.

Distribution copies are available in the Map Branch, CIA. The map appears in JANIS 75.

(78) Sketch Plan of Taegu (Taikyu), 1:17,500, Dec. 1945, Office of Strategic Services (CIA 3632).

This appears to be the only readily available plan covering Taegu. Though sketchy and highly generalized, it presents a fair picture of the transportation net, the distribution of built-up areas, and the locations of major buildings.

The map is printed on a small sheet (10" x 12") and it can easily be used to illustrate reports.

Twenty-four buildings or installations are numbered and identified by name or function in the legend. Built-up sections of the city are specially shaded and rice-growing areas are indicated. Hills surrounding the urban area are

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crudely hachured. The hydrography pattern is vague and easily confused with roads.

Distribution copies are available in the Map Branch, CIA.

(79) Inch'on, 1:12,500, July 1946, Army Map Service (AMS L951, Type F, AMS 1).

This appears to be the best available plan covering Inch'on. It is in effect a detailed topographical map presenting a complete assortment of physical and cultural information pertaining to this important port. The data presented are reasonably complete and reliable.

The map was compiled from Japanese maps, air photographs, hydrographic charts, and intelligence reports. The marginal data include a diagram indicating the sources used in preparing particular sections of the plan.

Prominent buildings and installations are identified by name or function and precise building outlines are shown. Built-up areas are shaded.

The transportation pattern is presented in considerable detail. Primary and secondary roads are identified. Railroads (4'8 $\frac{1}{2}$ " gauge single track, 4'8 $\frac{1}{2}$ " gauge double track, narrow gauge single track, narrow gauge double track) and tramways are shown.

Province, kun, and myon boundaries are located.

The map also provides information on the cultural features noted below:

water supply facilities	schools
police stations	post offices
high tension power lines	shrines
salt-evaporators	hospitals
cemeteries	

Relief is depicted with approximate contours at 10 meter intervals. Dikes and embankments are hachured.

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Hydrography is completely represented. In addition to the main streams, ponds, canals, and ditches are shown. Sea depths are given in fathoms. Tidal mud flats are portrayed and the speed of the tidal flow in certain channels is noted.

The distribution of woodlands (brushwood) and orchards is indicated.

The marginal data include linear scales in miles, meters, and yards. Isogonic information (1945) an index to boundaries, and a brief glossary are presented along with the previously mentioned data on compilation sources.

Copies are available in quantity at the Map Library, Army Map Service.

Limited quantities are available in the Map Branch, CIA.

(80) Hungnam (Konan), 1:10,000, May 1945, Army Map Service (AMS L951, 1st ed. AMS 1).

This appears to be the best available plan covering Hungnam. It is in effect a detailed topographical map presenting a complete assortment of fairly reliable physical and cultural information pertaining to this important industrial city.

The map was compiled from Japanese maps, air photographs, hydrographic charts and intelligence reports.

The marginal data include a diagram indicating the sources used in preparing particular sections of the plan.

Prominent city buildings and installations of the Chosen Nitrogen Fertilizer Company are identified by function. Precise building and plant outlines are shown. Residential and semi-residential areas are indicated with shading; shade variations distinguish sparsely built-up areas.

The transportation pattern is presented in considerable detail. Primary roads, secondary roads, and trails are identified. Railroads (4'8 $\frac{1}{2}$ " gauge single track, 4'8 $\frac{1}{2}$ " gauge double track, narrow gauge single track, and tramways

are shown. The name of the construction material usually appears beside symbols representing prominent bridges.

The map also provides information on the cultural features noted below:

water supply facilities	markets
high tension power lines	schools
power plants	cemeteries

Relief is depicted with contours at 10 meter intervals. Dikes and embankments are hachured. Precipitous slopes are specially marked and spot heights are given in meters.

Hydrography is quite fully represented. In addition to the main streams, ponds, marshes, and irrigation ditches are shown. Sea depths are given in fathom. The land utilization information is also fairly detailed; woodlands, grasslands, and rice growing areas are clearly portrayed.

The marginal data include linear scales in miles, meters, and yards. Isogonic information (1945) and a brief glossary are presented along with the previously mentioned data on compilation sources.

Copies are available in quantity at the Map Library, Army Map Service.

(81) Keijo-Jinsen Industrial Area, 1:25,000, May 1946, Army Map Service.

This is a detailed topographical map prepared especially to cover the industrial installations and transportation features between Kyōngsōng (Keijo, Seoul) and Inch'ōn (Jinsen). It shows the town of Keijo-Fu (a suburb of Kyōngsōng), the Fuhei-Sosha airport, several industrial installations, and the eastern part of Inch'ōn.

The map was compiled from Japanese maps, U.S. air photographs, and intelligence reports. The marginal data include a diagram indicating the sources used

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in preparing particular sections.

Although it does not record recent changes in the functions of certain buildings and installations, this map still presents a remarkably complete and effective portrayal of an economically important area.

Prominent buildings and installations are identified by name or function and precise building outlines are shown. Residential and semi-residential areas are indicated with shading and sparsely built-up areas are distinguished from densely built-up areas by shade variations.

The transportation pattern is presented in considerable detail. Main roads, rural roads, city streets, and trails, are identified. Railroads (4'8 $\frac{1}{2}$ " gauge double track, 3'6" single track) and numerous stations are shown.

The map also provides information on the cultural features noted below:

water supply facilities	prisons
township offices	temples
high tension power lines	shrines
power plants	cemeteries
military installations	salt pans

Relief is depicted with contours at 10 meter intervals. Dikes and embankments are hachured and spot heights are given in meters.

Hydrography is quite fully represented. In addition to the main streams, ponds, tidal flats, canals, and irrigation ditches are shown.

The land utilization information is also fairly complete. Woodlands, grasslands, and rice growing areas are clearly portrayed.

The marginal data include linear scales in miles, meters, and yards. A brief glossary is presented along with the previously mentioned data on compilation sources.

Copies are available in quantity at the Map Library, Army Map Service.

Limited quantities are available in the Map Branch, CIA.

(82) Wonsan (Genzan), 1:12,500, Feb. 1945, Army Map Service (AMS L951, 1st ed. AMS 1).

This map appears to be the best available plan covering Wōnsan. It is in effect a fairly detailed topographical map presenting an assortment of physical and cultural information pertaining to the port.

The map was compiled almost entirely from hydrographic charts and intelligence reports. It is not as reliable as similiar AMS plans (covering other Korean cities) based in part on air photographs.

Prominent buildings and installations are identified by name or function and their outlines are shown. Built-up areas are indicated with shading.

The transportation pattern includes primary roads, other roads, and trails. Railroads (4'8½" gauge single track) are also shown.

The map provides information on the cultural foatures noted below:

lighthouses	prisons
railroad service installations	schools
markets	cemeteries
oil refineries	dock facilities

City precinct are identified with numbers keyed to a legend giving Japanese and Korean forms for precincts names.

Relief is depicted with form lines. Dikes and embankments are hachured and precipitous slopes are specially marked. Spot heights are given in meters.

Sea depths are indicated in fathoms. Streams, ponds, ditches, and swamps are shown.

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The land utilization information is fairly complete. Woodlands, grasslands, and rice growing areas are vividly portrayed.

The marginal data include linear scales in miles, meters, and yards. Isogonic information (1944) and a brief glossary are presented.

Copies are available in quantity at the Map Library, Army Map Service.

Limited quantities are available in the Map Branch, CIA.

(83) Hamhung (Kanko), 1:10,000, Sept. 1944, Army Map Service.

This appears to be the best available plan covering Hamhung. It is a fairly detailed topographical map presenting a complete assortment of physical and cultural information pertaining to the city.

The map was compiled almost entirely from various Japanese maps and it is not quite as reliable as similar AMS plans (covering other Korean cities) based in part on air photographs. A marginal diagram indicates the sources used in preparing particular sections.

Prominent buildings and installations are identified by name or function and precise building outlines are shown. Residential and semi-residential areas are indicated with shading. Shade variations distinguish sparsely built-up areas.

The transportation pattern is presented in considerable detail. Primary roads, secondary roads, and trails, are identified. Railroads (4'8 $\frac{1}{2}$ " gauge single track, light railroad single track) are shown.

A 1:25,000 inset shows the site of an airfield 2 $\frac{1}{2}$ miles southeast of the city.

The map also provides information on the cultural features noted below:

water supply facilities	markets
high tension power lines	schools
military installations	hospitals

silk mills

prisons

cemeteries

Relief is depicted with contours at 5 meter intervals. Dikes and embankments are hachured. Precipitous slopes are specially marked and spot heights are given in meters.

Hydrography is quite fully represented. In addition to the main streams, ponds, wells, and irrigation ditches are shown.

The land utilization information is also fairly complete. Woodlands, grasslands, mulberry growing areas, and rice producing lands are vividly portrayed.

The marginal data include linear scales in miles, meters, and yards. A list of precincts and a brief glossary are presented along with the previously mentioned data on compilation sources.

Copies are available in quantity at the Map Library, Army Map Service.

Limited quantities are available in the Map Branch, CIA.

(84) Keiki Kaijō, 1:13,800, 1930, publisher unknown (Japanese text).

This map originally appeared in a Japanese book or periodical. Only a photo reproduction was examined. There is every indication that the scale of the reproduction approximates that of the original.

The map probably presents a fairly reliable picture of the alignment of main transportation features in and around the city. Information on installations and the extent of the built-up area may be badly out-of-date. In spite of these liabilities this plan appears to offer the best available coverage for Kaisōng (Keiki Kaijō, Songdo, Kaijō).

The area around the city is systematically contoured and numerous spot heights are given in meters. The appearance of the terrain data suggests that the

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information was copied totally or in part from various large-scale topographical sets.

Railroads, main roads, city streets, and trails are shown in some detail.

Dark shading locates the built-up area. A few buildings are identified.

Reference copies and a limited number of distribution copies (photo reproductions) are available in the Map Branch, CIA.

(85) Sketch Plan of Kaesōng (Songdo) Kaijō, 1:13,500, 29 Dec. 1945, Interim Research and Intelligence Service, Department of State, (CIA 3635).

This plan is little more than a rudimentary sketch. It was apparently prepared by enlarging selected data appearing on a topographical sheet covering the area.

Railroads, main roads, and a few bridges are shown but little or no detail on city streets is presented. Relief is not indicated and only a few main streams are portrayed. Schools, courts, warehouses, and various government offices are located and identified.

This sketch plan does not present as detailed a picture of the city as the previously discussed Japanese map (84) Keiki Kaijō. It is included in the report only because it is readily available and because the text is in English.

Distribution copies can be obtained at the Map Branch, CIA.

(86) Chinnamp'o (Chinnampo), 1:10,000, May 1945, Army Map Service (AMS L951, 1st ed. AMS 1).

This plan was compiled almost entirely from Japanese maps and U.S. hydrographic charts. The information pertaining to the town proper is fairly reliable but in the surrounding area, changes in the coastline, new industrial installations, and new transportation features (revealed by air photographs), are not adequately portrayed.

Prominent buildings and installations are identified by name or functions; outlines of buildings are shown. Residential and semi-residential areas are distinguished from densely built-up areas.

Primary roads, secondary road, and trails are identified. Railroads (4'8 $\frac{1}{2}$ " gauge single track, narrow gauge single track) are also shown.

City precincts are identified with numbers keyed to a legend giving Japanese and Korean forms for precinct names.

The map also provides information on the cultural features listed below:

custom houses	cotton mills
courts	rice mills
police stations	cemeteries
schools	prisons
hospitals	banks

Relief is depicted with contours at 10 meter intervals. Dikes and embankments are hachured. Precipitous slopes are specially marked and spot heights are given in meters.

Hydrography is quite fully represented. In addition to the main streams; swamps, mud flats, and ponds are shown. Sea depths are given in fathoms.

Land utilization information is quite detailed. Woodlands, grassland and rice growing areas are vividly portrayed.

The marginal data include linear scales in miles, meters, and yards. Isogonic information (1945) and a brief glossary are presented along with a diagram indicating the sources used in preparing particular sections of the map.

Copies are available in quantity at the Map Library, Army Map Service.

Limited quantities are available in the Map Branch, CIA.

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(87) Chinnamp'o, Korea, 1:11,700, date of photography: 13 Dec. 1944, no publisher, no authority.

This is a fairly clear air photo mosaic covering all of Chinnamp'o and a considerable portion of the surrounding area. It supplements map (86) Chinnamp'o (Chinnampo) by covering a larger portion of the city's environs and by presenting more accurate data on the coastline, industrial installations and transportation features.

A reference copy is available in the Map Branch, CIA.

(88) Sketch Plan of Kwangju (Koshu), 1:14,000, 29 Dec. 1945, Office of Strategic Services (CIA 3627).

This appears to be the only readily available plan of Kwangju. It was prepared by copying selected data from a 1918 topographical sheet covering this area. The portrayal of the town is highly generalized.

The value of this plan lies in its fairly complete identification of buildings and other cultural features. Locations are noted for the following:

Southern Presbyterian mission	railroad services installations
various schools	rice mills
water works	electric plant
two hospitals	slaughter house
tax office	cotton mill
barracks	post office
gasoline storage tanks	prison
provincial offices	banks
commercial museum	city hall
police station and jail	Buddhist temple

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Railroads, main roads, and a few bridges are located, but the portrayal of city streets is sketchy and incomplete. The built-up area is crudely indicated with shading.

Relief is not portrayed and only a few main streams are shown.

Distribution copies are available in the Map Branch, CIA.

(89) Mokp'o (Moppo), 1:12,500, March 1945, Army Map Service.

This appears to be the best available plan covering Mokp'o. It is in effect a detailed topographical map presenting an assortment of physical and cultural information pertaining to the port.

The map was compiled largely from Japanese maps and hydrographic charts. It is not as reliable as similar AMS plans (covering other Korean cities) based in part on air photographs.

Prominent buildings are identified by name or function and their outlines are shown. Residential and semi-residential areas are indicated with shading.

Shade variations distinguish sparsely built-up areas from densely built-up areas.

Primary roads, other roads, and trails, are identified. Railroads (4'8 $\frac{1}{2}$ " gauge; single track, double track) are also shown.

City precincts are identified with numbers keyed to a legend giving Japanese and Korean forms for precinct names.

This map also provides information on the miscellaneous cultural features noted below.

lighthouses	schools
railroad service facilities	post offices
markets	city offices
water supply facilities	police stations

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Relief is depicted with numbered contours at 10 meter intervals. Dikes and embankments are hachured and steep slopes are specially marked.

Hydrography is quite fully represented. In addition to the main streams; reservoirs, conduits, marshes, mud flats, and ditches are shown. Sea depths are given in fathoms.

The land utilization information is quite detailed. Woodland, grassland, and rice growing areas are vividly portrayed.

The marginal data include linear scales in miles, meters, and yards. A brief glossary is presented along with a diagram indicating the sources used in preparing particular sections of the map.

Copies are available in quantity at the Map Library, Army Map Service.
Limited quantities are available in the Map Branch, CIA.

(90) Haeju (Kaiehu), 1:12,500, May 1945, Army Map Service (AMS L951, 1st ed. AMS 1).

This appears to be the best available plan covering Haiju. It is a fairly detailed topographical map presenting an assortment of physical and cultural information pertaining to the town and its environs.

The map was compiled from Japanese maps, hydrographic charts, and intelligence reports. It is not as reliable as similar AMS plans (covering other Korean cities) based in part on air photographs.

Prominent buildings are identified by name or function and their outlines are shown. Residential and semi-residential districts are indicated with shading. Shade variations distinguish sparsely built-up areas from densely built-up areas.

Primary roads, other roads, and trails, are identified. Railroads (3'6" gauge or less, single track) are also shown. The alignment of some railroads is approximate.

The map also provides information on the miscellaneous cultural features noted below:

lighthouses	schools
markets	city offices
prisons	police stations
water-supply facilities	cemeteries
post offices	hospitals

Relief is depicted with contours at 10 meter intervals. Dikes and embankments are hachured. Precipitous slopes are specially marked.

Hydrography is quite fully represented. In addition to the main streams, ponds, marshes, mud flats, and irrigation ditches are shown. Sea depths are given in fathoms.

The land utilization information is rather detailed. Woodland, grassland, and rice growing areas are vividly portrayed.

The marginal data include linear scales in miles, meters, and yards. Isogonic information (1945) and a brief glossary are presented along with a diagram indicating the sources used in preparing particular sections of the map.

Copies are available in quantity at the Map Library, Army Map Service. Limited quantities are available in the Map Branch, CIA.

(91) An-tung and Shingishu, 1:12,500, Oct. 1945, Army Map Service.

This appears to be the best readily available plan covering Sinuijua (Shingishu) and the adjacent Manchurian town, Antung. It was compiled from

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Japanese maps, Japanese hydrographic charts, and U.S. air photographs.

Outlines of most prominent buildings are shown and many are identified by name or function.

The city street pattern is presented in considerable detail and 2 classes of roads are identified. Railroads (4' 8½" gauge; single track, double track) are shown and various railroad service installations are identified.

The map also provides information on the miscellaneous cultural features noted below:

schools	military installations
government offices	water supply facilities
prisons	bridges
power plants	airfields
radio stations	log ponds
paper mills	markets
ferries	boat yards

Relief is depicted with numbered contours at 10 meter intervals. Dikes and embankments are hachured. Soundings in the Yalu River are given in fathoms.

The land utilization information is quite detailed. Woodland, brushland, grassland, and rice growing areas are identified.

The marginal data include linear scales in miles, meters, and yards, a brief glossary, and a diagram indicating the sources used in preparing particular sections of the map.

Copies are available in quantity at the Map Library, Army Map Service.

(92) Sketch Plan of Chonju (Zenshu), 1:13,000, Dec. 1945, Interim Research and Intelligence Service, Department of State, (CIA 3630).

This appears to be the only readily available plan showing Chenju. It was prepared by copying selected data from a 1917 topographical sheet covering the area. The portrayal of the town is highly generalized.

The main value of the plan lies in its fairly complete identification of buildings and other important cultural features. The following are located:

Presbyterian hospital	churches
schools	post offices
warehouses	banks
courts	prisons
governor's residence	factories
police station	

Railroads, main roads, and a few bridges are located. The portrayal of city streets is sketchy and incomplete. The built-up area is crudely indicated with shading.

Relief is not depicted and only a few main streams are shown.

Distribution copies are available in the Map Branch, CIA.

(93) Kunsan (Gunzan), 1:13,000, Sept. 1946, Army Map Service (AMS I951, 1st Ed. AMS 1).

This appears to be the best available plan covering Kunsan. It is in effect a detailed topographical map presenting a complete assortment of physical and cultural information pertaining to the port.

The map was compiled from Japanese maps, U.S. air photographs, hydrographic charts, and intelligence reports. It presents a fairly reliable portrayal of the town.

Prominent buildings are identified by name or function and their outlines are shown. Residential and semi-residential districts are indicated with shading.

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Shade variations distinguish sparsely built-up areas from densely built-up areas.

Main roads, secondary roads, and trails, are identified. Railroads (3'6" gauge, single track) are also shown.

The map provides information on such miscellaneous cultural features as lighthouses, post offices, markets, dock facilities, prisons, water supply facilities, high tension power lines, schools, city offices, police stations, hospitals, and power plants.

Relief is depicted with contours at 10 meter intervals. Dikes and embankments are hachured. Precipitous slopes are specially marked.

Hydrography is quite fully represented. In addition to the main streams; ponds, canals, marshes, mud flats, and irrigation ditches are shown. River depths are given in fathoms.

The land utilization information is quite detailed. Woodlands, grasslands, and extensive rice-growing areas are vividly portrayed.

The marginal data include linear scales in miles, meters, and yards. Isogonic information (1945) and a brief glossary are presented along with a diagram indicating the sources used in preparing particular sections of the map.

Copies are available in quantity at the Map Library, Army Map Service. Limited quantities are available in the Map Branch, CIA.

(94) Korea, 1:10,000, 1916-1937, Land Survey Bureau, Government General of Chosen* (Japanese text).

This set consists of 55 irregularly aligned and sometimes overlapping sheets laid out so as to cover a town or city and a portion of the surrounding area.

*In the U.S. Army Map Service Map Library, the publisher of this series is referred to as the "Japanese Military Staff".

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The representation of both physical and cultural features is considerably more detailed than that offered by other large-scale sets covering Korea.

Most of the sheets are based on original surveys executed about 1917. A few sheets, published between 1933 and 1937, are based in part on later surveys.

At the time of their publication and for many years after the various sheets of this series offered the best available coverage for Korean towns and cities.

Although the majority of the sheets available in the U.S. are now out-of-date (changes in urban patterns resulting from the Japanese war effort are not recorded), there are still a few towns for which this set offers the best, if not the only, large-scale coverage. This appears to be true of three towns listed in the city plan table (Part I, Section IX), namely:

- (a) Taijön (Taiden)
- (b) Chinju (Shinshū)
- (c) Hoeryöng (Kainei)

Although some special attention has been given to the three sheets noted above, the following descriptive comments are generally applicable to the entire series.

Prominent buildings and installations are identified by name or function and in some instances precise building outlines are shown. The built-up portions of urban areas are indicated.

Province, pu, kun, up, and myon, boundaries are located.

The transportation pattern is presented in considerable detail. Roads (several classes) and railroads are shown.

The legend identifies such cultural features as water-supply facilities, high tension power lines, mines, quarries, bridges, ferries, factories, temples,

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shrines, prisons, cemeteries, etc.

The distribution of woodlands, grasslands, rice-growing areas, orchards, and other vegetation types is vividly shown.

Relief is depicted with contours at 5 meter intervals. Dikes and embankments are hachured and precipitous slopes are specially marked. Spot heights are given in meters.

Reference copies of the three sheets cited previously and nearly all other sheets in this series are available in the Map Library, Army Map Service.

Usable black and white copies can be made.

(95) Najin (Rashin), 1:20,000, Army Map Service (AMS L951 1st ed. AMS1), Jan. 1946.

This map appears to be the best available plan covering Najin. It is in effect a sketchy topographical map presenting incomplete physical and cultural information pertaining to the port.

The map was compiled from hydrographic charts, Japanese maps (1:50,000), and intelligence reports. It is not as reliable as similar AMS plans (covering other Korean cities) based in part on air photographs.

Only a few prominent buildings are identified by name or function. The approximate distribution of built-up areas is indicated with shading.

Roads are identified and railroads (4'8 $\frac{1}{2}$ " gauge, single track) are shown.

The map also provides information on the miscellaneous cultural features noted below:

railroad service facilities	warehouses
dock facilities	city offices
military installations	

Relief is depicted with form lines and a few spot heights in meters. The

hydrography pattern is sketchy; only a few main streams are shown. Sea depths are given in fathoms. Grasslands are identified by symbols and one small rice growing area is located.

The marginal data include linear scales in miles, meters, and yards.

Isogonic information (1946) and a brief glossary are presented along with a diagram indicating the sources used in preparing particular sections of the map. Copies are available in quantity at the Map Library, Army Map Service. Limited quantities are available in the Map Branch, CIA.

(96) Rashin Kō, 1:16,500, 1945, Office of Strategic Services (CIA X646.2).

This monochrome plan of Najin is not quite as complete as map (95) Najin (Rashin) but it is on a larger scale.

A Japanese hydrographic chart was the main compilation source and the data presented are about as reliable as those appearing on map (95).

Main roads and railroads are located and a few prominent buildings are identified.

Relief is not indicated and only a few main streams are shown. Numerous sea depths are given in feet.

The marginal data include a linear scale in meters.

Distribution copies are available in the Map Branch, CIA.

(97) Masan, 1:12,500, Feb. 1946, Army Map Service (AMS L951, 1st Ed. AMS 1).

This appears to be the best available plan covering Masan. It is in effect a fairly detailed topographical map presenting an assortment of physical and cultural information pertaining to the port.

The map was compiled from Japanese maps, and hydrographic charts. It is not as reliable as similar AMS plans (covering other Korean cities) based in part on air photographs.

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Prominent buildings are identified by name or function and their outlines are shown. The built-up area is indicated with shading.

Primary roads, secondary roads, projected streets, and trails are identified. Railroads (3'6" gauge, single track) are also shown. Bridges are located by symbol and the construction material is usually indicated.

The map also provides information on the miscellaneous cultural features noted below:

warehouses	schools
dock facilities	markets
water supply facilities	city offices
military installations	police stations
high tension power lines	cemetaries
post offices	hospitals
temples	

Relief is depicted with form lines and embankments are hachured. Precipitous slopes are specially marked. Spot heights are given in meters.

Hydrography is quite fully represented. In addition to the main streams, wells, canals, and mud flats are shown. Sea depths are given in fathoms.

The marginal data include linear scales in miles, meters, and yards. Isogonic information (1946) and a brief glossary are presented along with a diagram indicating the sources used in preparing particular sections of the map.

Copies are available in quantity at the Map Library, Army Map Service. Limited quantities are available in the Map Branch, CIA.

(98) Yoeu (Raieu), 1:10,000, May 1945, Army Map Service.

This appears to be the best available plan covering Yoeu. It is in effect a

fairly detailed topographical map presenting an assortment of physical and cultural information pertaining to the port.

The map was compiled largely from Japanese maps and hydrographic charts. It is not as reliable as similar AMS plans (covering other Korean cities) based on air photographs.

Prominent buildings are identified by name or function and their outlines are shown. Residential and semi-residential areas are indicated with shading which distinguishes sparsely built-up areas from densely built-up areas.

Primary roads, other roads, and trails are identified. Railroads (4'8 $\frac{1}{2}$ " gauge, single track) are also shown.

The map provides information on the miscellaneous cultural features noted below:

lighthouses	post offices
markets	schools
oil storage	city offices
docks	police stations
ferries	hospitals
cable landings	

Relief is depicted with contours at 20 meter intervals. Dikes and embankments are hachured. Precipitous slopes are specially marked. The few spot heights given are in meters.

Main streams, mud flats, and ditches are shown. Sea depths are given in fathoms.

Woodlands, grasslands, and rice-growing areas are identified.

The marginal data include linear scales (miles, meters, and yards), a brief glossary, and a list of sources.

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Copies are available in quantity at the Map Library, Army Map Service. Limited quantities are available in the Map Branch, CIA.

(99) Joshin (Songjin) Plan of Port and Town, 1:12,000, 1944, Map 10 in Survey of Korea, U.S. War Department.

This appears to be the best available plan covering Songjin. It is probably based on a British map which, in turn, was compiled largely from hydrographic charts.

Comparison with similar maps covering other Korean cities suggests that the representation of the central part of the town is fairly reliable while the portrayal of the city's environs is sketchy and incomplete.

Outlines of some prominent buildings are shown but very few installations are identified. The built-up area is indicated with dark shading.

Railroads and roads are located. Many of the city streets are depicted with dotted lines to indicate that they are, or were, projected.

Relief is shown with form lines and spot heights in feet. Dikes and embankments are hachured and steep slopes are specially marked.

The hydrography pattern is sketchy and sea depths are not given.

Limited quantities of distribution photocopies are available in the Map Branch, CIA.

(100) Unggi (Yuki), 1:20,000, 1945, Army Map Service.

This appears to be the best available plan covering Unggi. It is in effect a fairly detailed topographical map presenting an assortment of physical and cultural information pertaining to this small port.

The map was compiled largely from Japanese maps, hydrographic charts, and U.S. air photo coverage of poor quality. It is not very reliable.

A few prominent buildings are identified by name or function and their outlines are shown. Residential and semi-residential districts are indicated with shading which distinguishes sparsely built-up areas from densely built-up areas.

Primary roads, other roads, and trails are identified. Railroads (4'8 $\frac{1}{2}$ " gauge, single track) are also shown.

The map provides information on the miscellaneous cultural features noted below:

lighthouses	post office
dock facilities	customs house
police station	weather bureau office
town office	fire station
bridges	

Relief is depicted with form lines. Dikes and embankments are hachured and precipitous slopes are especially marked.

Main streams, canals, and mud flats are shown. Sea depths are given in fathoms.

Woodland, grassland, and rice growing areas are identified.

The marginal data include linear scales (miles, meters, and yards), a brief glossary, and a diagram indicating the sources used in compiling particular sections of the map.

Copies are available in quantity at the Map Library, Army Map Service. Limited quantities are available in the Map Branch, CIA.

(101) Unggi (Yuki), Korea, 1:17,500, 1945, Office of Strategic Services (CIA X - 646.3).

This is a simple outline plan of Unggi. It is not as complete as map (100) Unggi (Yuki) but it is on a slightly larger scale and for a few small areas it

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offers data not shown on the Army Map Service plan.

Like map (100), this plan was also compiled from air photos (Dec. 1944) and Japanese hydrographic charts. It does not appear to be quite as reliable as map (100).

Main roads and railroads are located and a few prominent buildings are identified.

Relief is not indicated and only a few main streams are shown. Numerous sea depths are given in feet.

The marginal data include a linear scale in cables and a 1:200,000 location inset.

Distribution copies are available in the Map Branch, CIA.

(102) Map of Ranan, c. 1:12,000, Map 12 in Survey of Korea, U.S. War Department, 1944. (text in Japanese and English).

This map originally appeared in a Japanese publication. Selected portions of the text were translated before it was enlarged and reproduced photographically for inclusion in the War Department report Survey of Korea. It appears to be the best available plan for this once important Japanese military center.

Over a large part of the urban area, precise outlines are shown for buildings and installations. In the older section of the town, built-up districts are depicted with shading. A number of important buildings are identified.

Roads, railroads, and city streets are shown in some detail. Relief in the area around the town is indicated with hachures and spot heights in meters.

Some of the information presented is not entirely clear on the available black and white reproductions. This is particularly true where roads, railroads, and rivers cross or parallel one another. At a few points, the Japanese text also detracts from the clarity.

Reference copies and a limited number of distribution copies (photo reproductions) are available in the Map Branch, CIA.

(103) Sketch Plan of I-ri (Ri-ri), 1:13,000, 1945, Interim Research and Intelligence Service, Department of State (CIA 3629).

This appears to be the only readily available plan showing the town. It was prepared by copying selected data from a 1917 topographical sheet covering the area.

The portrayal of the town is highly generalized but a few buildings such as; district offices, schools, post offices, and railroad stations are identified. The built-up area is shown with dark shading.

Railroads, main roads, and a few bridges are located but the representation of city streets is sketchy and incomplete.

Relief is not depicted and only a few main streams are shown.

Distribution copies of this map are available in the Map Branch, CIA.

(104) Kyomip'o, 1:12,500, Feb. 1946, Army Map Service (AMS L951, 1st Ed., AMS 1)

This is the best available plan covering Kyomip'o. It is in effect a detailed topographical map presenting a complete assortment of physical and cultural information pertaining to the town.

The map was compiled from 1:10,000 Japanese maps, U.S. air photographs, hydrographic charts, and intelligence reports.

Prominent buildings are identified by name or function and their precise outlines are shown. Built-up areas are indicated with shading and bombed areas are specially marked.

Primary roads and trails, are identified and railroads (4'8 $\frac{1}{2}$ " gauge single track, 4'8 $\frac{1}{2}$ " gauge double track, narrow gauge single track, narrow gauge double track) are shown.

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The map provides information on the miscellaneous cultural features noted below:

factories	water-supply facilities
dock facilities	schools
bridges	hospitals
military installations	markets
cemeteries	high-tension power lines

Relief is depicted with contours at 5 meter intervals. Dikes and embankments are hachured.

Hydrography is quite fully represented. In addition to the main streams, reservoirs, sand bars, mud flats, and irrigation ditches are shown. Depths in the main river channel are given in fathoms.

Woodland, grassland, and rice growing areas are identified.

The marginal data include linear scales (miles, meters, and yards), a brief glossary, an index to boundaries, and a diagram indicating the sources used in compiling particular sections of the map.

Copies are available in quantity at the Map Library, Army Map Service. A limited number of copies are available in the Map Branch, CIA.

(105) Chinhae (Chinkai), 1:12,500, Jan. 1945, Army Map Service.

This appears to be the best available plan covering Chinhae. It is in effect a fairly detailed topographical map presenting an assortment of physical and cultural information pertaining to the town and a large part of the surrounding area.

The map was compiled largely from Japanese maps and hydrographic charts. It is not quite as reliable as similar AMS plans (covering other Korean cities) based partially on air photographs.

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Primary roads, other roads, and trails, are identified. Railroads (4'8 $\frac{1}{2}$ " gauge, single track) are also shown.

The map provides information on the miscellaneous cultural features noted below:

oil storage facilities	bridges
military installations	hospitals
salt pans	banks
police stations	schools
city offices	power stations
dock facilities	high tension power lines

City precincts are identified with numbers keyed to a legend giving Japanese and Korean forms for precinct names.

Relief is depicted with form lines and by spot heights in meters. Dikes and embankments are hachured.

Hydrography is quite fully represented. In addition to the main streams; reservoirs, canals, mud flats, and ditches are shown. Sea depths are given in fathoms.

Woodlands and rice growing areas are identified.

The marginal data include linear scales (miles, meters, and yards), a brief glossary, and a diagram indicating the sources used compiling particular sections of the map.

Copies are available in quantity at the Map Library, Army Map Service.

Limited quantities are available in the Map Branch, CIA.

(106) Sketch Plan of Ch'ongju (Seishu), 1:13,500, 1945, Interim Research and Intelligence Service, Department of State, (CIA 3634).

This appears to be the only readily available plan showing Ch'ongju. It was

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prepared by copying selected data from a 1918 topographical sheet of the area.

The portrayal of the town is highly generalized but a few buildings, such as hospitals, churches, schools, warehouses, post offices, police stations and town offices, are identified. The built-up area is shown with dark shading.

Railroads (approximate alignment), main roads, and a few bridges are located but the representation of city streets is probably incomplete.

Relief is not depicted and only a few main streams are shown.

Distribution copies of this map are available in the Map Branch, CIA.

(107) Sketch Plan of P'ohang-dong (Hokō-dō), 1:13,000, 1945, Interim Research and Intelligence Service, Department of State, (CIA 3631).

This appears to be the only readily available plan showing P'ohang-dong. No information is available regarding the sources used in its compilation.

The portrayal of the town is highly generalized but a few buildings such as, police stations, customs houses, warehouses, schools, rice mills, post offices, and hospitals are identified. The built-up area is shown with dark shading.

Railroads, main roads, and a few bridges are located but the representation of city streets is probably incomplete.

Relief is not depicted and only a few main streams are shown.

Distribution copies of this map are available in the Map Branch, CIA.

(108) Musan (Mosan), 1:25,000, May 1945, Army Map Service.

This appears to be the best available plan covering Musan. It is in effect a fairly detailed topographical map presenting an assortment of physical and cultural information pertaining to this small mining town and a large part of the surrounding area.

The plan was compiled largely from Japanese maps. It is not as reliable as similar AMS plans (covering other Korean cities) based in part on air photographs.

A few prominent buildings are identified by name or function and their outlines are shown. Built-up areas are indicated with shading.

Primary roads, secondary roads, and trails, are identified. Railroads (4'8 $\frac{1}{2}$ " gauge, single track) are also shown.

The map provides information on the features noted below:

iron ore deposits	freight yards
government buildings	railroad stations
police stations	hospitals
post offices	

Relief is depicted with contours at 20 meter intervals and numerous spot heights in meters are given. Dikes and embankments are hachured and steep slopes are specially marked. Hydrography is quite fully represented. Woodlands and grasslands are identified.

The marginal data include linear scales (miles, meters, and yards), a brief glossary, and data on compilation sources.

Copies are available in quantity at the Map Library, Army Map Service.

(109). Translated A Study of Korean Dialects, Vol. II by the late OKURA, Shimpei; Iwanami Shuten, 1944 (Japanese text).

This valuable work presents an exceptionally complete analysis of Korean dialects and localized pronunciations.

Volume II, the only volume available for this examination, includes ten detailed linguistic maps scaled at 1:4,000,000. These briefly described below:

No. 1 Indicates localities where dialect studies were made.

Nos. 2-9 Use distinctive symbols to indicate how certain basic words are pronounced in different areas. Part of the pronunciation information is remanized.

No. 10 Locates precise boundaries for areas where six main dialects are spoken.

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All of the maps show province and kun boundaries. The linguistic data can be interpreted with very little translating.

A reference copy of this work is available in the Foreign Document Branch, CIA (call number I94647) 819.9).

Usable black and white copies can be made.

(110) Highways of Korea, Jan. 1945, Strategic Intelligence Branch, Military Intelligence Division Office, Chief of Engineers, U.S. Army (S.E.S. 154).

This is a useful summary providing detailed data on the main highways of Korea.

Although it is based on information assembled during the war it still presents a fairly reliable picture of the main facts regarding Korea's roads.

An outstanding feature of this study is a clear outline map (Highways of Korea, 1:1,500,000, Plate I) on which the main highways are identified with numbers keyed to various tables presenting data on road width, surface conditions, construction materials, traffic capacity, bridges, etc.

The bridge data are particularly detailed; photographs of several important bridges are included. The work also presents a few sketchy city plans on which bridge locations are emphasized.

The text provides background information which can be very helpful in interpreting road data appearing on maps.

Distribution copies of this study are available through the office of the Chief of Engineers, U.S. Army. Reference copies are available in Reference, Department of State.

(111) Communications Map (Chosén), 1:1,200,000, August 1, 1933, Communications Bureau, Government-General of Chosén (Japanese text).

This map presents very complete and detailed data on Korea's postal and telecommunications system as organized and operated under the Japanese Government-General of Chosen. It appears to be the best available map of its type.

A great variety of symbols are used to identify the various classes of post and telegraph offices, administrative centers, telephone offices, routes for carrying mail (distance between stations given), mail relay points and mail exchange points.

Province boundaries and main streams are located. Insets show air-mail routes and the layout of the postal and telecommunications systems in Kyōngsōng and Pusan.

More recent maps of similar scope may become available in the near future.

Reference copies are available in the Map Branch, CIA and in the Map Library, Army Map Service.

(112) Translated Japanese Soil Map of Korea, 1:500,000, 1910, (Japanese text).

This appears to be the basic soil map of Korea.

The distribution of soil types is indicated with colors and shading keyed to an analytical legend where the 68 variations of shade and color are logically grouped and identified.

A large part of Korea had not been accurately surveyed at the time this map was prepared and, although the distribution pattern for main soil types is probably correct, the location of numerous features in relation to geographic coordinates is not very reliable. This is particularly true of northern Korea.

The map has an advantage over other soil maps in that it presents soil data in relation to a fairly complete portrayal of relief (shown with form lines) and important cultural features such as cities, towns, province boundaries, roads, railroads, and mines.

A reference copy is available in the Map Library, Army Map Service.

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No usable black and white copies can be made.

(113) Korea, 1:50,000, Land Survey Bureau, Government-General of Chosen
(Japanese text).

This is the basic topographic map covering Korean and nearby islands. It has been prepared on the polyhedral projection used for nearly all large scale topographic maps of the former Japanese Empire. If available information is correct, all of Korea is covered by 723 fully contoured sheets.

Prior to the war, sketchy, shaded relief sheets (portraying strategic coastal areas) were distributed to the public in place of the fully contoured sheets which the Japanese regarded as secret military documents. This, together with the fact that strategic area coverage was rarely shown on Japanese index maps, conveyed the erroneous impression that the entire country was not covered by contoured sheets.

U.S. map procurement activities in Korea clearly suggest that the entire country was mapped at this scale even though there may be a few small area for which contoured 1:50,000 sheets are not currently available in the United States.

Three sheets of this series offer complete coverage for the short boundary between Korea and the USSR. Approximately 50 sheets provide nearly complete coverage for the Yalu and Tumen rivers which, with their tributaries, form the greater part of the boundary between Korea and Manchuria. On these border sheets, the Manchurian river bank is shown but the topography of the area on the Manchurian side is generally incomplete. However, this set still provides the largest scale and most reliable coverage available for major sections of these important boundary rivers.

The surveys on which this set is based were conducted during the first World War. Most of the sheets were originally published in the 1920's and there are

indications that subsequent revision and correction has not been extensive. More complete information on survey and revision dates will become available when recent Army Map Service acquisitions are more completely appraised.

The sheets, covering 15' of longitude and 10' of latitude, are printed in two colors (water in blue, all other data in black). Contours appear at 20 meter intervals and every fifth contour is accentuated. On most sheets, elevations of contours (expressed in Arabic numerals) appear at points where the contour lines meet the edges of the sheet. Spot heights are given in meters.

A great variety of symbols is used to identify various physical and cultural features. The scope of the information presented is best indicated by an outline of the legend. There is some variation from sheet to sheet but most of the features listed in the following outline are identified by symbol on all contoured sheets covering areas where they occur.

(a) Physical Features and Survey Data

Terrain

cliff
rock outcropping
scattered rock
depression
ravine, gully
crumbling bank
erosion

Vegetation and Land Use

orchard	cultivated marsh
tea	irrigated rice field
mulberry	dry rice field
scrub pine	reeds
wild land	conifers
bamboo	broad-leaf trees
grove	garden
marsh	salt pans
land use	
boundaries	

Hydrography

height of river bank
depth of water
stone sheathing
concrete sheathing
direction of flow
navigable for boats
waterfalls
ditches

Soil Types

mud
sand
gravel

Heights and Survey Points

triangulation point
secondary control point
bench mark
spot elevation

(b) Communications

Railroads

main railways
light railways
special railways
double track
station
single track

Roads

first class roads:	connecting roads
4 meters or over	unclassified roads
2 meters or over	trail
less than 2 meters	impassable for carts
second class roads	tree-lined road
other principal roads	cut
tunnel	fill

Telecommunication and Post Offices

post office	post offices without telegraph service
-------------	---

postal station	postal station without telegraph service
telegraph office	telephone office

Navigation

lighthouse	anchorage
radio mast	commercial port
warning signal	fixed beacon
port of call	fixed beacon (lightless)
ship anchorage	buoy (lightless)

River Crossings

wooden bridge	passenger and horse
foot bridge	ferry (2 boats)
concrete bridge	passenger ferry
direction of flow	(single boat)
foot ford	

(c) Buildings and Installations

Military Installations

military reservation
naval reservation
division headquarters
army barracks
naval camp
material dump
powder magazine
navy lookout tower

Public Buildings

Japanese government office	police station
provincial seat	court of appeals
county seat, city office	prison
township office	customs house
bureau of public safety	tax office
school	govt. monopoly
hospital	bureau office or
gendarmerie post	factory
meteorological station	office of maritime
	affairs

Industrial and Commercial Installations

shipyard
factory
bank
water wheel or mill
generating plant
market
slaughter house

Religious Edifices

ancestral shrine
pagoda
church
shrine
temple

(d) Political

Boundaries

international
provincial
kun, pu, (gun, fu)
myon, up (men, yu)
government lands
boundary markers

(e) Other Features

Landmarks

castle site	tower
stone lantern	windmill
monument	crans
statue	isolated trees
signpost	chimney

Barriers

masonry wall
stone wall
earthen wall
hedge
fences

Gates

gate
gate with roof

castle gate
Korean gate
shrine gate

Miscellaneous

power lines	graves
stumps	tombs
springs	mines
mineral springs	stone steps

Although they present a wealth of useful information, the symbols used to identify the features noted in the foregoing outline are often crowded on the map in such a way that they are difficult to identify with certainty. Conventional signs representing inconsequential features sometimes detract from the clarity of place names, contours, and transportation information. Where settled areas are portrayed, it is not unusual to find several ideographs and from ten to fifteen different symbols in one square inch of map surface.

In addition to the previously outlined legend the marginal data include survey and publication dates, an index to adjoining sheets, a relief diagram, identification of the set, and linear scales in kilometers and ri. Coordinates (arabic numerals) are given in the four corners of each sheet.

The cultural data presented on most of the available 1:50,000 sheets represents towns, cities, and transportation features as they existed fifteen to thirty years ago. Relatively recent changes in urban areas caused by population growth, industrial development, and changes in the transportation pattern, are not recorded.

In spite of the outdated cultural information and in spite of the fact that extensive use of symbols occasionally detracts from the map's legibility, this set is still the most important map covering Korea. The sheets are only slightly less

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more accurate than the 1:50,000 sheets covering Japan proper. Until a new mapping program is undertaken, this series will continue to be a basic map from which nearly all other maps of Korea will derive some of their information.

The series is being reproduced (with a translation and other data added) by the U.S. Army Map Service - AMS L751, map (114) in this report. The index accompanying map (114) shows the sheet layout for both the original Japanese sheets and the AMS reproductions.

Distribution copies (photo reproductions) are obtainable through the Map Library, Army Map Service.

Reference copies of nearly all original sheets are available in the Map Library, Army Map Service.

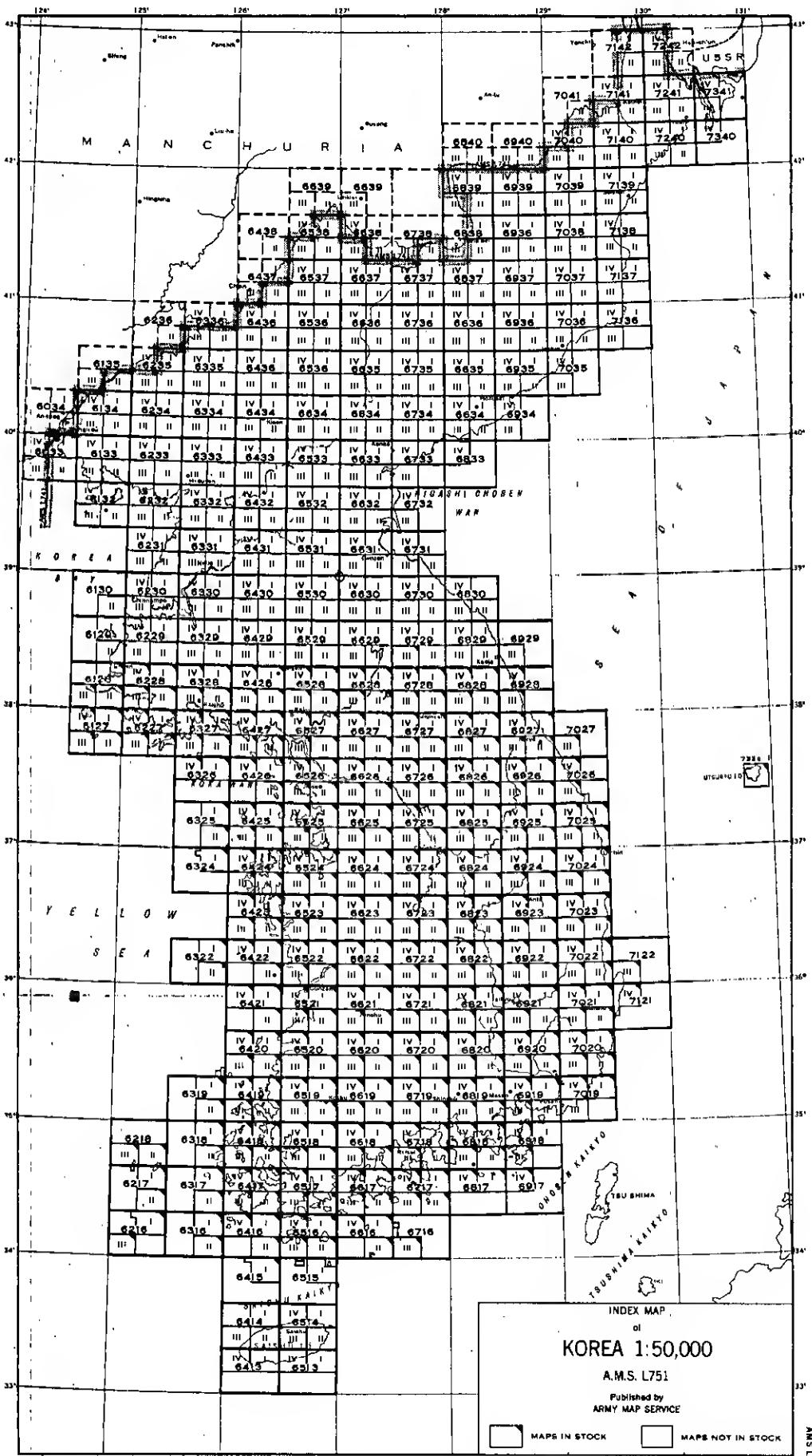
(114) Korea, 1:50,000, 1945-46, U.S. Army Map Service, AMS L751, type A (AMS 1).

This is the Army Map Service reproduction of the 1:50,000 set just described -- map (113) in this report.

At present the available sheets provide nearly complete coverage for Korea south of $38^{\circ} 30'$ N. latitude and the Army Map Service has active plans for extending the coverage into northern Korea. Sheets covering coastal areas will probably be published first and at least part of the series will eventually be prepared in color.

Availability of the sheets, romanized names, and other factors suggest that this is the best large scale terrain map for Americans to use.

The original Japanese sheets have been reproduced (photo offset) in black and white with romanized names (both Japanese and Korean forms) overprinted in purple. A polyconic grid has been superimposed and the Japanese legend has been translated. Isogonic information, an index to boundaries, a meter to feet



INDEX MAP
of
KOREA 1:50,000

A.M.S. L751

Published by
ARMY MAP SERVICE

CONNECT TO JUNE 1946 ARMY MAP SERVICE, U. S. ARMY, WASHINGTON, D. C. 150773

KOREA 1:50,000
AMS USI

conversion table, a glossary, and linear scales in miles and yards, have also been added.

Basically, the map remains unchanged and the outline of contents as well as the critical comments made in connection with the original series, map (113), are also applicable to this reproduction.

In some densely settled areas the overprinted place names unavoidably detract from the clarity of symbols and other data. However, the romanized names have generally been printed in such a way that the Japanese characters can still be read.

Copies are available in quantity in the Map Library, Army Map Service.

(115) Population, 1:12,500,000, appears on page 420 in the Geographical Review, Vol. XXIV, No. 3, July 1934, accompanying a brief article titled "Land Utilization Maps of Korea" by J.W. Coulter and Bernice Bong Hee Kim.

This is a simple, dot map covering all of Korea. Province boundaries are located.

The distribution of rural population is shown with dots representing 10,000 persons while the number of inhabitants in each urban area is indicated with circles proportional in size to the cities' population.

The map is based primarily on statistics published in March 1932, by the office of the Governor-General of Chosen. Information from the Annual Report on the Administration of Chosen, 1928-29, was also used.

Reference copies of the periodical in which this map appears are available in numerous libraries.

The map will yield usable black and white copies.

(116) Rice (irrigated), 1:12,500,000, appears on page 420 in the Geographical Review, Vol. XXIV, No. 3, July 1934, accompanying a brief article titled "Land Utilization Maps of Korea" by J.W. Coulter and Bernice Bong Hee Kim.

This is a simple, carefully prepared, dot distribution map covering all of Korea. Province boundaries are located.

Areas where irrigated rice is grown are indicated with dots. The map is based primarily on statistics published in March 1932, by the office of the Governor-General of Chosen. Information from the Annual Report on the Administration of Chosen, 1928-29, was also used.

Reference copies of the periodical in which this map appears are available in numerous libraries.

The map will yield usable black and white copies.

(117) Mulberry Trees, 1:12,500,000, appears on page 420 in the Geographical Review, Vol. XXIV, No. 3, July 1934, accompanying a brief article titled "Land Utilization Map of Korea" by J.W. Coulter and Bernice Bong Hee Kim.

This is an effective dot distribution map covering all of Korea. Province boundaries are located but no place names are given.

The distribution of mulberry trees is indicated with dots. The map is based primarily on statistics published in March 1932, by the office of the Governor-General of Chosen.

Reference copies of the periodical in which this map appears are available in numerous libraries.

The map will yield usable black and white copies.

(118) Soy Beans, 1:12,500,000, appears on page 420 in the Geographical Review, Vol. XXIV, No. 3, July 1934, accompanying a brief article titled "Land Utilization Maps of Korea" by J.W. Coulter and Bernice Bong Hee Kim.

This is a carefully prepared dot distribution map covering all of Korea. Province boundaries are located but towns are not named.

Soy bean cultivation areas are indicated with dots. The map is based primarily on statistics published in March 1932, by the office of the Governor-General of Chosen. Information from the Annual Report on the Administration of

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Chosen, 1928-29, was also used.

Reference copies of the periodical in which this map appears are available in numerous libraries.

The map will yield usable black and white copies.

(119) Radishes, 1:12,500,000, appears on page 421 in the Geographical Review, Vol. XXIV, No. 3, July 1934, accompanying a brief article titled "Land Utilization Maps of Korea" by J.W. Coulter and Bernice Bong Hee Kim.

This is a simple dot distribution map covering all of Korea. Province boundaries are located.

Areas where radishes are grown are indicated with dots. The map is based primarily on statistics published in March 1932, by the office of the Governor-General of Chosen.

Reference copies of the periodical in which this map appears are available in numerous libraries.

The map will yield usable black and white copies.

(120) Millet, 1:12,500,000, appears on page 421 in the Geographical Review, Vol. XXIV, No. 3, July 1934, accompanying a brief article titled "Land Utilization Maps of Korea" by J.W. Coulter and Bernice Bong Hee Kim.

This is an effective dot distribution map covering all of Korea. Province boundaries are located but towns are not named.

Areas where millet is grown are indicated with dots. The map is based primarily on statistics published in March 1932, by the office of the Governor-General of Chosen. Information from the Annual Report on the Administration of Chosen, 1928-29, was also used.

Reference copies of the periodical in which this map appears are available in numerous libraries.

The map will yield usable black and white copies.

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(121) Barley, 1:12,500,000, appears on page 421 in the Geographical Review, Vol. XXIV, No. 3, July 1934, accompanying a brief article titled "Land Utilization Maps of Korea" by J.W. Coulter and Bernice Bong Hee Kim.

This is a simple, carefully prepared, dot distribution map covering all of Korea. Province boundaries are located.

Areas where barley is grown are indicated with dots. The map is based primarily on statistics published in March 1932, by the office of the Governor-General of Chosen.

Reference copies of the periodical in which this map appears are available in numerous libraries.

The map will yield usable black and white copies.

(122) Wheat, 1:12,500,000, appears on page 421 in the Geographical Review, Vol. XXIV, No. 3, July 1934, accompanying a brief article titled "Land Utilization Maps of Korea" by J.W. Coulter and Bernice Bong Hee Kim.

This is a simple, dot distribution map covering all of Korea. Province boundaries are located.

Areas where wheat is grown are indicated with dots. The map is based primarily on statistics published in March 1932, by the office of the Governor-General of Chosen. Information from the Annual Report on the Administration of Chosen, 1928-29, was also used.

Reference copies of the periodical in which this map appears are available in numerous libraries.

The map will yield usable black and white copies.

(123) Korea, 1:250,000, 1944-47, U.S. Army Map Service, AMS L551, type F (AMS 2).

English text, reliability, relative completeness of coverage, connection with a gazetteer, and other factors make this the most useful set map covering Korea.

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Forty sheets provide complete coverage for Korea and adjacent islands south of 42° N. Latitude. The small part of northeastern Korea lying north of the 42nd parallel is covered by three joining sheets of AMS L541, Manchuria 1:250,000. Thus far, two of these three border sheets have been published and, though they are less complete than the 1:250,000 Korea sheets, the cartographic style is basically the same.

The Korea 1:250,000 series was first published in 1944 (AMS 1). Late in 1946 and in the early months of 1947, new revised sheets (AMS 2) were published. In August 1948, only one sheet south of the 42nd parallel was yet to be published in revised form.

Within the limitations imposed by the scale, the 1:250,000 (AMS 2) sheets are remarkably complete and reliable. In preparing them the best compilation sources were used and up-to-date information from air photos and intelligence reports was carefully added. The revised sheets are much more complete and reliable than those of the 1944 edition and, where coverage at this scale is needed, these sheets should always be given preference.

The series was prepared on a polyconic projection. Each sheet covers one degree of latitude and one degree of longitude. Coordinates appear in the corners of all sheets and stub coordinates are printed along the sheet margins at 15° intervals. Longitude is based on Greenwich.

Sheets are numbered in relation to the International Map of the World and the area covered by an IMW sheet is divided into twenty-four squares, six horizontal and four vertical. These divisions, representing individual sheets of the 1:250,000 series, are lettered (A-Z) from left to right. Under this system, a 1:250,000 sheet is identified by the IMW sheet designation followed by a single letter (e.g. K-52 V, 1-51 L).

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The map can be used in the field as an operational road and railroad guide; however, expressions such as "dual highway", "generally surfaced", and "improved dirt road", which appear in the legend must be thought of in terms of oriental road standards and not in terms of road conditions prevailing in the United States. Bridges and numerous ferries are identified.

Four foot, eight and one-half inch gauge railroads (single track, double track) and narrow gauge railways are clearly located although the track alignment is sometimes approximate. Tunnels and railroad bridges are identified.

Air fields are named and their precise outlines are generally indicated. The alignment of runways is also shown.

Distinctive symbols identify large cities, cities, walled cities, towns, and villages. If a city is a to or kun capital, this is indicated by underlining the name.

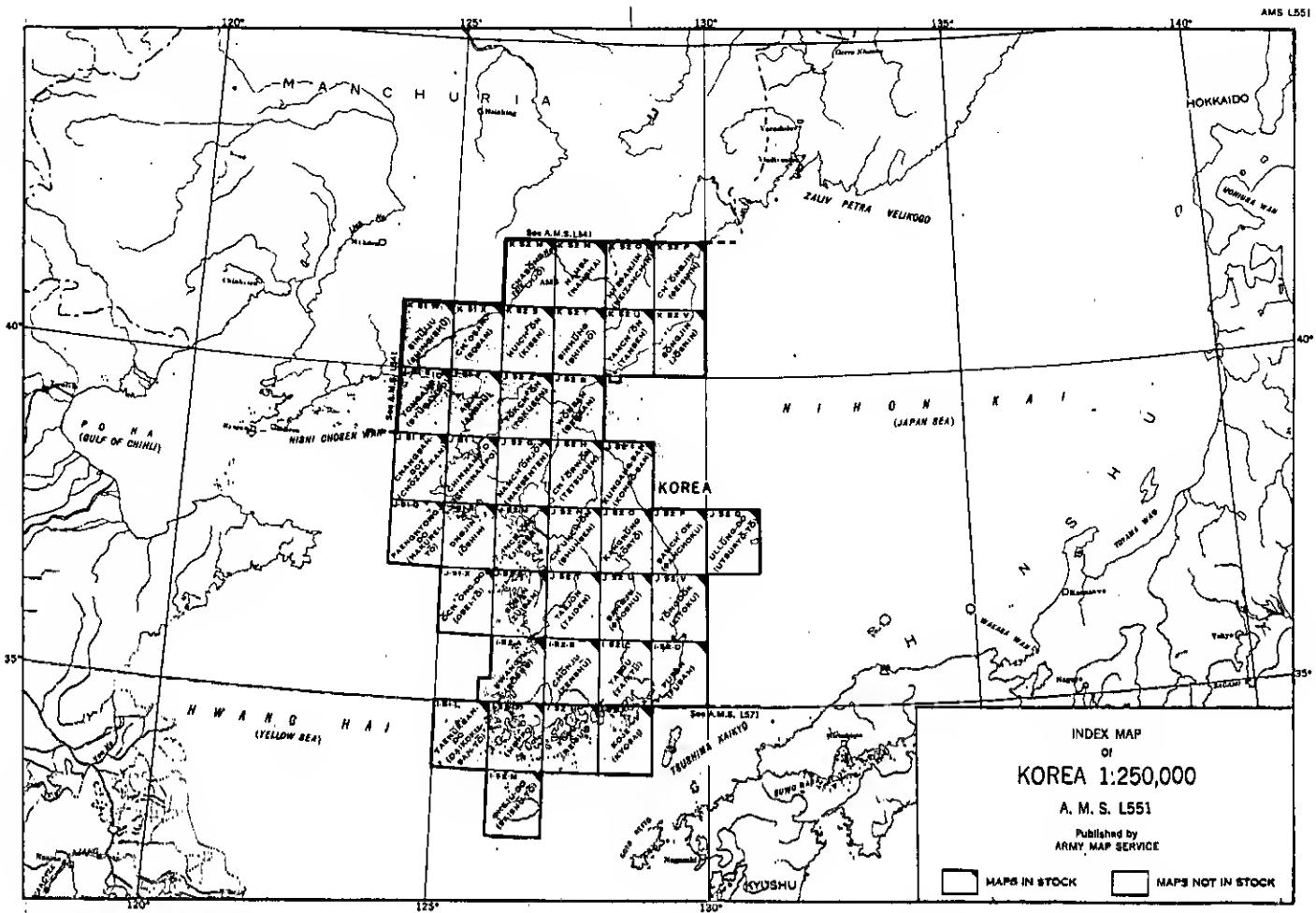
International, to, and kun boundaries are located. A useful index to boundaries aids in interpreting the political data.

Relief is indicated with contours at 100 meter intervals and occasional auxiliary contours at 50 meter intervals.

Form lines are used to show relief in areas where detailed topographical information was unavailable at the time the sheet was compiled. Spot heights, copied primarily from map (113) Korsa, 1:50,000, are given in meters.

The stream pattern is clearly presented in blue. Dams are depicted and reservoir shorelines are shown in considerable detail. The Suiho reservoir and the important reservoirs north of Hungnam are adequately portrayed. Tidal flats, marshes, levees, salt pans, and rice growing areas are also located.

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INDEX MAP
OF
KOREA 1:250,000

A. M. S. L551

Published by
ARMY MAP SERVICE

Correct to December

ARMY MAP SERVICE, U. S. ARMY, WASHINGTON, D. C. 150118
2-47

KOREA 1:250,000
A. M. S. L551

SHEET NUMBER	SHEET NAME	KEY NUMBER
I 51L	TAEHUKSAN-DO (DAIKOKUZAN-TO)	115861
I 52A	KWANGJU (KOSHU)	115857
I 52B	CHONJU (ZENSHU)	115858
I 52C	TAEGU (TAIKYU)	115859
I 52D	PUSAN (PUSAN)	115860
I 52G	MOKPO (MOPPO)	115862
I 52H	YOSU (REISUI)	115863
I 52I	KOJE (KYOSAI)	115864
I 52M	CHEJU DO (SAISHU-TO)	115865
J 51E	YONGAMPO (RYUGAMPO)	115834
J 51F	ANJU (ANSHU)	115836
J 51K	CHANGSAN-GOT (CHOZAN-KAN)	115839
J 51L	CHINNAMPO (CHINNAMPO)	115840
J 51Q	PAENGNYONG-DO (HAKUREI-TO)	115844
J 51R	ONGJIN (OSHIN)	115845
J 51X	OCHONG-DO (OSEI-TO)	115851
J 52A	TOKCHON (TOKUSEN)	115837
J 52B	WONSAN (GENZAN)	115838
J 52G	NAMCHONJOM (NANSENTEN)	115841
J 52H	CHORWON (TETSUGEN)	115842
J 52I	KUMGANG SAN (KONGO-SÁN)	115843
J 52M	INCHON (JINSEN)	115846
J 52N	CHUNCHON (SHUNSEN)	115847
J 52O	KANGNUNG (KORYO)	115848
J 52P	SAMCHOK (SANCHOKU)	115849
J 52Q	ULLUNG-DO (UTSURYO-TO)	115850
J 52S	SOSAN (ZU ISAN)	115852
J 52T	TAEJON (TAIDEN)	115853
J 52U	SANGJU (SHOSHU)	115854
J 52V	YONGDOK (EITOKU)	115855
K 51W	SINUIJU (SHINGISHU)	115835
K 51X	CHOSAN (SOSAN)	115828
K 52M	CHASONG (WI JO)	115830
K 52N	NAMSA (NANSHA)	115824
K 52O	HYESANJIN (KEIZANCHIN)	115825
K 52P	CHONGJIN (SEISHIN)	115827
K 52S	HUICHON (KIBEN)	115829
K 52T	SINHUNG (SHINKO)	115831
K 52U	TANCHON (TANSEN)	115832
K 52V	SONGJIN (JOSHIN)	115833

In addition to a fairly complete legend identifying town symbols, political boundaries, and transportation features; the marginal data include the following:

A meters to feet conversion table.

Linear scales in miles, kilometers and yards.

Isogonic information.

An index to adjoining sheets.

An index to boundaries (both to and kun).

A glossary of generic terms (English, Korean, Japanese).

A compilation diagram indicating the sources used in the preparing particular sections of each sheet.

Copies are available in quantity in the Map Library, Army Map Service.

(124) Geologic Map of Chosen Showing Distribution of Minerals, 1:1,000,000 1920, Geological Survey, Government-General of Chosen, (text in Japanese with parts in English).

This appears to be one of the best general geological maps covering all of Korea.

The distribution of important rock formations is indicated on a fairly complete background of physical and cultural information. Each rock type represented on the map by a color or shade is named in a logically arranged legend where identification in relation to the geological time scale is also given.

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Symbols locate deposits of the minerals, clays, sands, and stones noted below:

gold ore	mica
placer gold	talc
silver ore	ornamental stone
copper ore	porcelain clay
lead ore	building stone
iron ore	asbestos
zinc ore	rock crystals
mercury ore	fluorite
tungsten ore	iron sand
pyrite	agalmatolite
chromite	molybdenum ore
quartz sand	whetstone

Only deposits are located. No indication is given as to their relative importance.

The cultural information is quite complete. Roads, railroads, province boundaries, kun boundaries, and numerous towns are located. The names of provinces and major towns are romanized.

A reference copy is available in the U.S. Geological Survey Library.

Black and white copies of very limited usefulness can be made.

(125) Economic Map of Chosen, 1:1,500,000, 1929, Chosen Railway Bureau (Japanese text).

This map covers all of Korea showing province and kun boundaries. Although rather old, it still presents useful economic information on a fairly complete

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background of cultural data.

The distribution of coal fields and forest areas is clearly indicated with color shading. Names of marine products are printed at appropriate places along the coast and names of mineral, agricultural, and industrial products are printed on producing areas.

Sea routes are shown and ports are classified. Railroads (various classes; open, projected) and roads are located.

Five insets (1:3,000,000) show the distribution of population, the layout of the transportation net, average annual rainfall, average annual temperature, and the distribution of water power sites. The inset dealing with water power appears to be the most important. It uses distinctive symbols to locate over 125 water power sites. Developed or licensed sites are differentiated from undeveloped sites and all are classified according to their actual or estimated capacity in kilowatts.

Reference copies are available in the Map Branch, CIA and in the Map Library, Army Map Service.

No usable black and white copies can be made.

(126) Mineral Resources of Chōsen (Korea), 1914-1923 (?) Geological Survey, Government-General of Chōsen (Japanese and part English text).

This periodical, which appears to have stopped publication about 1923, records the results of the earlier Japanese geological investigations in Korea. In addition to many excellent articles (some in English, others abstracted in English), the various issues include a number of carefully prepared, large-scale geological maps.

The scales and coverage patterns of the maps are extremely varied but most of them were designed to portray important mineral deposits or mine sites. Geological relationships pertinent to mineral exploitation are emphasized and some of the maps include geological profiles. In many instances, map texts are in English.

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Reference copies of most issues published between 1914 and 1923 are available in the U.S. Geological Survey Library.

A few of the maps will yield usable black and white reproductions.

(127) Bulletin of the Mineral Survey of Chōsen, 1916 to 1934 or later, Geological Survey, Government-General of Chōsen, (Japanese and part English text).

The Japanese may have regarded this periodical as being a continuation of

(126) Mineral Resources of Chōsen (Korea). The two journals are very similar in scope and both include large-scale, colored, geological maps emphasizing geological data pertaining to the exploitation of minerals.

Most of the issues published between 1926 and 1934 are available for reference in the U.S. Geological Survey Library.

Some of the maps will yield usable black and white copies.

(128) Bulletin of the Geological Survey of Chōsen (Korea), 1919 (?) to 1930 or later, Geological Survey, Government-General of Chōsen (Japanese and part English text).

This appears to have been the main geological journal published by the Geological Survey under the Government-General of Chōsen.

In addition to many excellent articles (some abstracted in English), it includes numerous photographs, tables, diagrams, profiles, and geological maps.

The maps are of a more general type than those appearing in (126) Mineral Resources of Chōsen, and (127) Bulletin of the Mineral Survey of Chōsen. They cover environs of towns, mineral producing areas, kun, and sometimes provinces. Geological relationships pertinent to the exploitation of minerals are given some emphasis but maps dealing with water supply and other matters are also presented. In several instances map texts are in English.

Some of the maps will yield usable black and white reproductions.

(129) Translated/ Map of Forest Distribution of Chōsen, 1:500,000, Dec. 1910, Agricultural, Industrial, and Commercial Section, Government-General of Chōsen (Japanese text).

At the time of its publication and for several years after, this map was the basic forestry map of Korea. The 1910 edition apparently the only issue now available in the United States, is rather out of date but it still presents some information of value on Korea's forests.

The descriptive remarks that follow apply only to the 1910 edition not to any revised edition that may have been published at a later date.

On a rather full background of physical and cultural information (spot heights, hydrography, political boundaries, cities, transportation, etc.) colors are used to locate reforested areas, areas without standing trees, and areas where small trees are grown for transplanting. Symbols identify "red pine", needle bearing trees other than red pine, and broadleaf trees. Areas where trees have been burned off to permit the planting of crops are also noted by symbol. Boundaries of various forest administrative districts are shown.

A reference copy (photo reproduction) is available in the Map Branch, CIA.

(130) General Geological Map of Chōsen (Korea), 1:1,000,000, 1932, Geological Survey, Government-General of Chōsen. (text in Japanese with parts in English).

This appears to be the best general geological map covering all of Korea.

On a background of physical and cultural information (spot heights, submarine contours, hydrography, political boundaries, cities, transportation), the distribution of seventeen important rock formations is indicated with distinctive colors. Each rock formation represented is named in a logically arranged legend where identification in relation to the geological time scale is given. Mine sites and important mineral localities are noted by symbol.

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A copy of this map is available for reference in the U.S. Geological Survey Library.

No usable black and white copies can be made.

(131) A Study of Chinese Emigrants Settled in Korea on Fire Farms, March 1924, Government-General of Chosen (Japanese text).

This is a very detailed, illustrated study dealing with the Chinese emigrant farmers in Korea who obtain agricultural land by burning off sections of forest.

A large part of the information pertains to northern Korea.

In addition to various pictures, graphs, and tables, a number of maps are presented. The most important of these are noted below:

(a) Chinese Emigrants by District, 1:2,300,000

The distribution of Chinese emigrants is indicated with graphic lines proportional in length to the number of Chinese dwelling in the settlements to which the lines point. Shows province and kun boundaries.

(b) Comparative Arable Land by District, 1:8,000,000

Uses distinctive shading to indicate the distribution of arable land. To and kun boundaries are located.

The study also includes a number of regional plans showing various types of farm village settlement patterns and land use in the surrounding area.

A single reference copy of this work is available in the Foreign Documents Branch, CIA (call number: 245837 610.2(19)).

The two maps cited above and several of the regional plans will yield usable black and white copies.

(132) World Aeronautical Charts, 1:1,000,000, Aeronautical Chart Service, U.S. Air Force.

The 1:1,000,000 AAF charts present a fairly complete assortment of air navigation information on a generalized background of physical and cultural data. These charts are intended for use in route planning and for navigation on longer flights. Charts at a larger scale should be used as guides to air field approaches.

The descriptive remarks that follow apply only to the latest sheets available in August 1948. Although it is unlikely that the general characteristics of the charts will be greatly altered in the near future, AAF air charts are constantly being revised and new information may modify the details in a comparatively short time. Collectively, Charts 290, 380 and 387 provide complete coverage for Korea.

The series has been prepared on the Lambert Conformal Conic Projection. Each sheet covers 4° of latitude and 6° of longitude. Full coordinates are drawn at $30'$ and degree lines are ticked at $1'$ intervals.

The base maps (ground transportation, contours, locations of towns, etc.) were prepared in 1944 and 1945. On chart 380, the air navigation information is dated Feb. 1948; on chart 290, June 1948, and on chart 387, July 1947.

Aeronautical symbols are identified on the reverse side of all sheets. An index on the reverse side of each sheet shows world coverage for AAF 1:1,000,000 air charts.

Distinctive symbols locate about 25 airfields in Korea. Most of these are military fields with limited to adequate facilities. Where known, the length in feet of the longest runway is indicated for each field. A few of the airfields are classed as landing grounds with limited or no facilities, or with no logistic information available. On sheet 380, which covers most of Korea, the boundary for the Kimpo flight control area is indicated.

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Six major radio stations or radio navigational installations are located in Korea. Numerous surface navigation lights are located along the coasts and their flash intervals are indicated. Each chart includes 1945 magnetic variation data with annual change noted. All information directly pertinent to air navigation is printed on the charts in conspicuous purple.

Relief is indicated with contours or form lines drawn at 500, 1,000, 2,000, 8,000, 5,000, 7,000, and 9,000 foot levels. Layer coloring is also used. Each sheet carries an elevation table with the height of the sheet's highest point at the top. Spot heights are fairly well distributed over the charts. The drainage pattern is moderately detailed. Principal streams, and coastal tidal flats are shown.

The legend provides for six types of settlements classified on the basis of population (metropolitan areas 500,000 and over; large cities, 100,000 to 500,000; cities, 25,000 to 100,000; small cities, 10,000 to 25,000; large towns, 5,000 to 10,000; villages and towns, less than 5,000).

Single and double track railroads are shown and the road net is portrayed with varied lines distinguishing primary roads, secondary roads, and trails.

Province boundaries are not depicted.

Appropriate symbols locate such miscellaneous features as ferries, bridges, tunnels, and mines.

Copies are available in quantity from Headquarters, Aeronautical Chart Service, U.S. Air Force.

(133) Pilotage Charts, 1:500,000, Aeronautical Chart Service, U.S. Air Force.

The AAF charts scaled at 1:500,000 are intermediate in detail between those scaled at 1:1,000,000 and the approach charts scaled at 1:250,000. Each 1:500,000

chart is a component quadrant of an AAF 1:1,000,000 chart. Sheets are designated by a 1:1,000,000 chart number followed by a letter (A,B,C, or D).

The descriptive remarks that follow apply only to the latest sheets available at the time this information was assembled, August 1948. AAF charts are constantly being corrected. Revision and new publication may modify the available coverage in a comparatively short time.

Eleven sheets cover all of Korea and adjacent islands. These are 290 B, 290 C, 290 D, 380 A, 380 B, 380 C, 380 D, 387 A, 387 B, 387 C, 387 D. Four sheets are first editions, three are second editions, three are third editions and one is a fourth edition.

Air information is dated from Oct. 1944 to Jan. 1948. There are only a few areas for which the air information on the pertinent 1:500,000 sheet is more recent than that on the latest 1:1,000,000 chart covering the same area.

Distinctive symbols locate about 26 airfields in Korea. Most of these are military fields with limited to adequate facilities. Where known, the length of the longest runway is indicated for each field. Seven of the airfields are classed as landing grounds with limited or no facilities or with no logistic information available. Four seaplane landing areas are identified.

The base maps (topography, ground transportation, drainage, etc.) were prepared between 1943 and 1946.

The standard legend and symbols discussed in connection with (132) World Aeronautical Charts, 1:1,000,000, are also used on 1:500,000 charts.

In nearly all cases the portrayal of topography is more detailed than that offered by the 1:1,000,000 series. Relief is shown with contours or form lines drawn at 500, 1,000, 2,000, 3,000, 5,000, 7,000, and 9,000 foot levels. Layer colors are also used. Spot heights in feet on the 1:500,000 series are more numerous and

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better distributed than on the 1:1,000,000 charts. The height of each sheet's highest point is emphasized on the map and is also printed at the top of a marginal elevation diagram.

The drainage pattern on the 1:500,000 sheets is quite detailed. Streams, ponds, lakes, and reservoirs are shown. In coastal areas, sand bars, tidal flats, and offshore rocks are located.

The scale of the charts permits the inclusion of considerable ground transportation detail and a fairly complete presentation of the cultural pattern. Such features as bridges, ferries, passes, tunnels, and mines are given considerable emphasis. The same cultural symbols used on the 1:1,000,000 series are used on the 1:500,000 charts. International boundaries are shown but no internal political divisions are indicated.

Copies are available in quantity through Headquarters, Aeronautical Chart Service, U.S. Air Force.

(134) Aeronautical Approach Charts, 1:250,000, Aeronautical Chart Service, U.S. Air Forces.

The AAF 1:250,000 series, which covers nearly all of Korea with the largest scale air charts available, was intended primarily for guiding aircraft in approaching landing fields. The physical and cultural information has been selected and generalized in a way that would best serve this special function. For purposes other than air navigation, the 1:250,000 air charts should not be used in preference to map (123) Korea, 1:250,000, AMS L551.

The description that follows applies only to the latest sheets available at the time this information was assembled, August 1948. AAF charts are constantly being corrected and new publication or revision may modify the available coverage.

in a comparatively short time. When the charts are to be used for air navigation, the user should make every effort to obtain the latest available sheet.

The AF aeronautical approach charts are components of the AF charts scaled at 1:500,000 and 1:1,000,000. Each sheet is designated by a number indicating 1:500,000 chart, and a Roman numeral identifying a particular quadrant of the 1:500,000 chart.

Twenty-six sheets provide nearly complete coverage for Korea. These are: 290 B III, 290 C I, 290 C II, 290 C IV, 290 D II, 290 D III, 290 D IV, 380 A I, 380 A II, 380 A III, 380 B I, 380 B III, 380 B IV, 380 C I, 380 C II, 380 C III, 380 C IV, 380 D II, 380 D III, 387 A II, 387 A III, 387 B I, 387 B II, 387 B III, 387 B IV, and 387 C I. Chart 380 C I is a 1st edition; all others are advance editions.

Airfields are located with the same basic aeronautical symbols used on the AF charts scaled at 1:1,000,000 and 1:500,000. These identify 29 airfields in Korea. Fourteen fields are classed as military fields with limited to adequate facilities. Where known, the length of the longest runway is indicated for each field. Fifteen fields are classed as landing grounds with limited or no facilities or with no logistic information available. Four seaplane landing areas are identified.

Air information is dated from May 1945 to Jan. 1946. The air data appearing on a 1:250,000 chart is generally older than that offered by the 1:1,000,000 chart covering the same area.

Isogonic information is dated 1943. The base maps (topography, ground transportation, drainage, etc.) were prepared in the early months of 1945.

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The contour interval system is the same as that used on other AF charts.

Contours are drawn at 500, 1,000, 2,000, 3,000, 5,000, 7,000, and 9,000 foot levels. Contours on the 1:250,000 series are considerably more detailed than those on the 1:500,000 charts. The 1:250,000 charts also offer a greater density of spot heights than any of the smaller-scale AF air charts. Although relief is generally shown with contours, form lines are used for a few small areas.

The 1:250,000 charts present more cultural data than either the 1:500,000 or 1:1,000,000 charts. Numerous towns and villages are located and the transportation network is quite fully portrayed. Such miscellaneous features as bridges, ferries, canals, levees, tunnels, dams and mines are given considerable emphasis. Settlement, transportation, and other cultural symbols are the same as those on smaller-scale AF charts. International and provincial boundaries are located.

Copies are available in quantity through Headquarters, Aeronautical Chart Service, U.S. Air Force.

(135) Korea Province Maps, 1:500,000, 1919-1937, Land Survey Bureau, Government-General of Choson (Japanese text).

This series consists of thirteen irregularly aligned sheets of varying sizes laid out so each covers an individual province. A variety of editions have appeared since publication was started in 1919. The latest (?) edition was published in 1937.

This map was prepared primarily for showing internal political divisions. There are some areas for which it provides the most recent available data on administrative boundaries. Province (to), county (kun), and township (myon) boundaries are clearly located. Towns and cities (identified as to political status) are shown by symbol.

In addition to the political data, a fairly complete pattern of physical and cultural information is presented. Relief is shown with contours at 100 meter intervals. Railroads are located and four classes of roads are shown. Miscellaneous cultural features such as mines, shrines, beacons, and ports are identified by symbols.

Reference copies of most sheets are available in the Map Library, Army Map Service.

Black and white copies of limited usefulness can be made.

(136) Cheju (Saiehu Yū), Cheju-do (Saishū-tō), c. 1:20,000, April 1945, appears on page 10, Chapter VIII, JANIS 75.

This is a crude sketch plan of the largest town and administrative center of Cheju-do (Quelpart island). It appears to be the only readily available plan covering this small city.

The map was compiled from Japanese hydrographic charts and poor quality air photo coverage.

Main connecting roads are located and a few important harbor installations are identified but, aside from a rudimentary street pattern, no information on the town proper is given.

An inset map of Quelpart island shows the location of the town.

Reference copies of JANIS 75 are available in Reference, Department of State and in numerous other government offices.

The plan noted above will yield usable black and white copies.

(137) Japan and Korea, 1:3,000,000, December 1945, National Geographic Society.

This is a multi-colored general map covering Japan, Korea, southeastern Manchuria, and the east coast of China. It illustrates general relationships

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between Korea and adjacent areas.

Relief is shown with light plastic shading and a fair selection of spot heights in feet. Province boundaries are located and the place name pattern is quite complete although in Korea Japanese names are presented prominently with Korean forms given in parenthesis. Roads and railroads are located but some of the railways shown as operational are still under construction.

The boundary between Korea and Manchuria (in the vicinity of Lat. 42° N., Long. 128° E.) follows an interpretation commonly found on Chinese maps but disagrees with the alignment generally shown on maps published in the United States. A discussion of this disputed boundary will be found in Section VIII, BOUNDARIES, A. International.

Copies of this map can be obtained from the publisher. Limited quantities are available in the Map Branch, CIA.

(138) Waterways of Korea, February 1945, Strategic Intelligence Division, Office, Chief of Engineers, U.S. Army (S.E.S. 158).

This is a useful illustrated summary providing considerable detailed data pertinent to the inland waterways of Korea. Two important maps are included.

Plate I, Waterways of Korea, 1:1,500,000

A simple outline map locating main rivers and seaports. The streams are marked with numbers keyed to the text where each river is described in considerable detail.

Plate II, Diagrammatic Map, Waterways of Korea, 1:1,500,000

On this outline map river courses are generalized and marked with distinctive lines to indicate whether the stream is navigable for ocean steamers, junks, or small boats. River ports are located and the distance of each port from the mouth of the stream is given in kilometers.

The text includes numerous tables providing information on bridges spanning the navigable rivers, flood conditions, obstructions to navigation, port facilities, speed of tidal currents, and ice conditions.

Distribution copies of this study are available through the office of the Chief of Engineers, U.S. Army. Reference copies are available in the Reference Division, OCD, Department of State and in numerous other government offices.

(139) Highways, South Korea, September 1946, 1:4,300,000, 1946, General Headquarters, Commander-in-Chief, United States Army Forces, Pacific (Map No. 14 in Summation No. 12, United States Army Military Government Activities in Korea, Sept. 1946).

This is a sketchy road map covering Korea south of the 38th parallel. There is every reason to believe that, within the limitations of its scale, this map presents a reliable portrayal of Korea's main road net as it existed in September, 1946.

National and local highways are located. By showing roads under construction in red, the map provides a vivid picture of recent trends in highway development.

For a few small areas this map can be used to check data appearing on earlier maps; however, possibilities for this sort of checking are greatly restricted by the map's small scale, coarse lines, and limited selection of place names.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Useable black and white copies can be made.

(140) Output of Operating Metal Mines and Smelters, 1:8,000,000, 1946, General Headquarters, Commander-in-Chief, United States Army Forces, Pacific (Map No. 8 in Summation No. 12, United States Army Military Government Activities in Korea, Sept. 1946).

Two quantitative distribution maps of southern Korea appear under one title. One map locates principal mineral producing areas and the other deals with smelters.

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On both maps distribution is shown by printing circles near mine or smelter sites. The size of the circle is proportional to production and figuree (measuring output in metric tone) appear in each circle. The information covers the period 1 Jan. 1946 to 30 Sept. 1946.

Reference copies of the document in which this map appear are available in Reference, Department of State.

Usable black and white copies can be made.

(141) Police - South Korea, 1:9,000,000, July 1946, General Headquarters, Commander-in-Chief, United States Army Forces, Pacific (Summation No. 10, United States Army Military Government Activities in Korea, July 1946).

Two small-scale distribution maps of southern Korea appear under one title. The first shows the authorized number of police with graphic circle devices appearing in each province and the second indicates distribution of divisional and district police officee. An accompanying graph indicates the ratio of police to population.

Reference copies of the document in which these maps appear are available in Reference, Department of State.

Usable black and white copies can be made.

(142) Prison and Prison Industries, 1:4,000,000, July 1946, General Headquarter, Commander-in-Chief, United States Army Forces, Pacific (Map No. 3 Summation No. 10, United States Army Military Government Activities in Korea, July 1946).

This is a small-scale map covering Korea south of the 38th parallel. The distribution of prisons is indicated with circles proportional in size to each prison's population.

Additional symbole in red printed near the prison sites identify the institution's industries.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(143) Arable Lands-South Korea, 1:6,000,000, August 1946, General Headquarters, Commander-in-Chief, United States Army Forces, Pacific (Map No. 5 in Summation No. 11, United States Army Military Government Activities in Korea, August 1946).

Two small-scale maps of southern Korea appear under one title. The first shows land use (arable land only) and the second deals with the ownership of arable land.

The size of circles printed in provinces is proportional to the total amount of arable land. The relative importance of three types of land use is indicated by dividing the circle in pie graph fashion. This technique is also used on the land ownership map which identifies Japanese owned land and land not Japanese owned (Pre-V-J Day).

Reference copies of the document in which these maps appear are available in Reference, Department of State.

Usable black and white copies can be made.

(144) Forest Area Uses - South Korea, 1:5,500,000, August 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 6 in Summation No. 11 of U.S. Army Military Government Activities in Korea, August 1946).

This is a useful small-scale sketch map providing a fairly detailed breakdown of the various aspects of forest utilization in southern Korea.

The size of the circle printed in each province is proportional to the province's forest area. Figures appearing near the circle give actual forest acreage. The circles are divided in pie-graph fashion to indicate the percentage of the total forest area used for log production, firewood production, erosion control, or for other purposes.

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Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(145) Cotton Factories in South Korea, 1:4,000,000, August 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 11 in Summation No. 11, of U.S. Army Military Government Activities in Korea, August 1946).

This is a quantitative distribution map covering southern Korea.

Previous boundaries are shown and the sites of cotton factories are identified by symbol. The size of the symbols is proportional to the amount of ginned cotton processed annually. Numbers appearing near symbols are keyed to a table giving the names of companies.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(146) Rice Collection Program, South Korea - 1 Dec. '46 to August 1947, 1:9,000,000, August 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 21 in Summation No. 11, of U.S. Army Military Government Activities in Korea, August 1946).

This is a small-scale distribution map covering Korea south of the 38th parallel.

Prospective rice surpluses and deficits are indicated with figures and circles printed in provinces. The size of the circle is proportional to the quantity of rice. Circles representing surpluses and deficits are differentiated by color.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(147) Fisheries Productions, 1:9,000,000, June 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific, (Summation No. 9, of U.S. Army Military Government Activities in Korea, June 1946).

Two small-scale distribution maps appear under one title. The first shows production in metric tons and the second deals with the value of production in yen. Coverage of the two maps is confined to Korea south of the 38th parallel.

On both maps distribution is indicated with circles and figures printed in the provinces.

Reference copies of the document in which these maps appear are available in References, Department of State.

Usable black and white copies can be made.

(148) Spoken Korean Dialects, 1:10,000,000, August 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 31 in Summation No. 11, of U.S. Army Military Government Activities in Korea, August 1946).

This is a small-scale sketch map covering all of Korea. Province boundaries are shown. The distribution of seven major Korean dialects is indicated with distinctive shading. Accompanying graphs provide a breakdown showing the number of Koreans speaking each dialect.

Reference copies of the document in which this map appears are available in References, Department of State.

Usable black and white copies can be made.

(149) Fisheriss, 1:9,000,000, June 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Maps 1A and 1B in Summation No. 9 of U.S. Army Military Government Activities in Korea, June 1946).

This is a useful series of small-scale distribution maps. The sub-titles are as follows:

- a. Restricted Areas.*
- b. Government Offices and Stations.*

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- c. Associations and Guilds.*
- d. Fish Products Plants.
- e. Special Marine Products Plants.
- f. Ice Plants.
- g. Net Manufacturing Plants.
- h. Rope Manufacturing Plants.

An asterisk after the title indicates that the map covers all of Korea.

Other maps cover only South Korea.

The series provides an excellent, up-to-date, summary on fishing activity and related industries in Korea. On all of the maps distribution is clearly shown with symbols and shading in red.

Reference copies of the documents in which these maps appear are available in Reference, Department of State.

Usable black and white copies can be made.

(150) Telephone Control Offices, 1:5,000,000, June 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 6 in Summation No. 9, of U.S. Army Military Government Activities in Korea, June 1946).

This is a small-scale map covering all of Korea.

Distribution of telephone subscribers is indicated in red with graded dots (less than 100; 100-499; 500-999; 1000-4,999; 5,000-14,999; 15,000 or over).

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(151) Monopoly Bureau Organization, 1:9,000,000, June 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 13 in Summation No. 9, of U.S. Army Military Government Activities in Korea, June 1946).

This is a small-scale sketch map covering Korea south of the 38th parallel.

It shows the organization of the government monopoly bureau which controls production

and distribution of salt, tobacco, ginseng, and opium.

Monopoly bureau district boundaries are located and three types of bureau offices are shown by symbol.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(152) Ratio of Graduate Medical Doctors to Population, 1:9,000,000, June 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 15 in Summation No. 9 of U.S. Army Military Government Activities in Korea, June 1946).

This is a small-sketch map covering Korea south of the 38th parallel. Provinces boundaries are shown and each province is shaded distinctively to indicate the ratio of graduate medical doctors to population.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(153) Percent of School-Age Children in School, 1:6,000,000, June 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 17 in Summation No. 9, of U.S. Army Military Government Activities in Korea, June 1946).

On this small-scale map of Korea south of the 38th parallel, provinces are marked with seven grades of shading to indicate the percentage of school age children (6-18 years) in school.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

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(154) Korean Broadcasting Corporation, 1:6,000,000, June 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 18 in Summation No. 9, of U.S. Army Military Activities in Korea, June 1946).

This is a small-scale map covering Korea south of the 38th parallel. Broadcasting stations are located (with call letters given) and the coverage or reception area for each station is shown.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(155) Civilian Prison Population, 1:6,000,000, May 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 1 in Summation No. 8, of U.S. Army Military Government Activities in Korea, May 1946).

This is a quantitative areal distribution cartogram covering Korea south of the 38th parallel.

The civilian prison population is indicated with groups of squares (each representing one hundred persons) appearing near the names of towns. Distinctive shading differentiates between prisoners already sentenced and prisoners being held pending trial. Accompanying graphs provide a breakdown of the prison population on the basis of sex and race.

Reference copies of the document in which this map appears are available in Reference, Department of State.

(156) Principal Fishing Areas and Fishing Ports, Korea, 1:4,500,000, May 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 3 in Summation No. 8 of U.S. Army Military Government Activities in Korea, May 1946).

This map covers all of Korea showing fishing ports and principal fishing areas. Letters printed near fishing zones are keyed to a legend on the reverse side which names the fishing area and identifies the types of fish taken. Areas planted with codfish eggs in 1946 are marked with distinctive shading.

Reference copies of the document in which this map appears are available in Reference, Department of State.

(157) Principal Ginseng Producing Areas, 1:9,000,000, June 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 13 in Summation No. 9 of U.S. Army Military Government Activities in Korea, June 1946).

This is a rather crude, nonquantitative distribution map covering Korea south of the 38th parallel. Ginseng (a root used in medicine and for other purposes) producing areas are shown in red.

Reference copies of this document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(158) Principal Salt Producing Areas, 1:9,000,000, June 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 13 in Summation No. 9, of U.S. Army Military Government Activities in Korea, June 1946).

This is a small-scale sketch map covering Korea south of the 38th parallel. It is useful only for giving a very rough idea as to the distribution of salt-producing zones.

The map presumes to locate 4 types of private and government salt-producing areas but the printing is of poor quality and is, together with the small-scale of the map, practically nullifies the detailed classification data.

Reference copies of the document in which this map appears are available in Reference, Department of State.

(159) Principal Tobacco Producing Areas, 1:9,000,000, June 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 13 in Summation No. 9, of U.S. Army Military Government Activities in Korea, June 1946).

This is a small-scale, nonquantitative, distribution map covering southern Korea. It shows tobacco producing areas and uses distinctive shading to identify the varieties grown. Locations of tobacco growers' unions are given.

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Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(160) Postal Savings, 1:6,000,000, June 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 9 in Summation No. 9, of U.S. Army Military Government Activities in Korea, June 1946).

This is a small-scale distribution map covering Korea south of the 38th parallel.

Postal savings deposits and withdrawals are indicated by printing circles (proportional to the amount of money handled) and figures near major towns and cities. The circles representing deposits and withdrawals are differentiated by color.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(161) Fish Catch - South Korea, 1:9,000,000, October 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 5 in Summation No. 13, of U.S. Army Military Government Activities in Korea, October 1946).

This is a small-scale distribution map covering Korea south of the 38th parallel.

Fish production is shown with circles and figures printed in provinces. The area of the circle is proportional to production measured in metric tons. The map deals only with production for July 1946. An accompanying graph shows production from January to July.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

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(162) Processed Marine Products, 1:9,000,000, October 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 7 in Summation No. 13, of U.S. Army Military Government Activities in Korea, October 1946).

This is a small-scale distribution map covering Korea south of the 38th parallel.

Production of processed marine products is shown with circles and figures printed on provinces. The area of the circles is proportional to the stated production in metric tons. The map deals only with production in June 1946. Production from January to June is shown on an accompanying graph.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(163) Summer Grain Production Per Capita, 1:9,000,000, October 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 3 in Summation No. 13, of U.S. Army Military Government Activities in Korea, October 1946).

Two small-scale distribution maps are presented under one title. The first shows per capita production and the second illustrates the relation of the production to the South Korea average. Only the area South of the 38th parallel is covered.

On both maps, distribution is indicated with graphs and figures printed in each province. The map dealing with the south Korea average indicates surplus and deficit grain production.

Reference copies of the document in which these maps appear are available in Reference, Department of State.

Usable black and white copies can be made.

RESTRICTED

(164) Fisheries Workers and Fleet, 1:9,000,000, October 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 6 in Summation No. 13, of U.S. Army Military Government Activitiee in Korea, October 1946).

Five small-scale distribution maps covering Korea south of the 38th parallel are presented under one title. The subtitles are as follows:

- a. Number of Workers.
- b. Tonnage of Motorboats.
- c. Number of Motorboats.
- d. Tonnage of Sailboats.
- e. Number of Sailboats.

On all of the maps distribution is shown with circles and percentage figures printed in each province. The areas of the circles are proportional to the indicated percentages of the South Korea total. For each map the South Korea total equals 100%.

Reference copies of the document in which these maps appear are available in Reference, Department of State.

Usable black and white copies can be made.

(165) Rice Production Per Capital - Provinces, 1:9,000,000, October 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 4 in Summation No. 13, of U.S. Army Military Government Activitiee in Korea, October 1946).

Two small-scale distribution maps appear under one title. The first shows per capita rice production and the second illustrates the relation of the production to the South Korea average. Only the area south of the 38th parallel is covered.

On both maps, distribution is indicated with graphs and figures printed in each province. The map dealing with the South Korea average indicates surplus and deficit rice production.

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Reference copies of the document in which these maps appear are available in Reference, Department of State.

Useable black and white copies of limited usefulness can be made.

(166) Charcoal and Firewood Production, 1:9,000,000, October 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 10 in Summation No. 13, of U.S. Army Military Government Activities in Korea, October, 1946).

Two small-scale distribution maps appear under one title. The first shows estimated 1946 charcoal production and the second illustrates the estimated production of firewood, 1946. Both maps cover only the areas south of the 38th parallel.

On both maps distribution is indicated with circles and figures printed on provinces. The size of the circles is proportional to the estimated 1946 production (in metric tons for charcoal, thousands of cubic feet for firewood).

Reference copies of the document in which these maps appear are available in Reference, Department of State.

Useable black and white copies can be made.

(167) Sawmills, 1:4,500,000, October 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 12 in Summation No. 13, of U.S. Military Government Activities in Korea, October 1946).

This is a small-scale distribution map covering Korea south of the 38th parallel.

A pie graph is printed in each province with the size of the circle proportional to the number of sawmills. The divisions of each graph are shaded distinctively and the shading is keyed to a legend indicating the horsepower range (1-10, 11-14, 15-24, etc.) of the sawmills. The map is based on information collected up to the 30th of September 1946.

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Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(168) Lumber Production, 1:4,500,000, May 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 4 in Summation No. 8 of U.S. Army Military Government Activities in Korea, May 1946).

This is one of the best available maps giving a general picture of lumber production in Korea. It is based on 1942 statistics and provides coverage for the whole country.

A pie graph is printed on each province with the size of the circle proportional to the total volume of lumber produced. The divisions of the circle indicate the relative importance of various types of lumber in each province's production. Ten tree types are identified.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(169) Coal Mining--South Korea, 1:9,000,000, October 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 14 in Summation No. 13, of U.S. Army Military Government Activities in Korea, October 1946).

This is a small-scale distribution map covering Korsa south of the 38th parallel.

Distribution is shown with circles and figures printed on coal mining areas. The size of the circle is proportional to production as measured in metric tons.

Reference copies of the document in which this map appears are available in Reference, Department of State.

(170) Monthly Per Capita Food Costs, 1:9,000,000, October 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 19 in Summation No. 13, of U.S. Army Military Government Activities in Korea, October 1946).

Two small-scale distribution maps appear under one title. The first shows per capita food costs for the eight provinces south of the 38th parallel and the second indicates food costs for five major South Korean cities (Seoul, Taejon, Taegu, Pusan, and Kwangju).

Reference copies of the document in which these maps appear are available in Reference, Department of State.

(171) Government Controlled Stable Food Stocks, 1:9,000,000, October 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 20 in Summation No. 13, of U.S. Army Military Government Activities in Korea, October 1946).

This is a small-scale distribution map covering Korea south of the 38th parallel.

Circles and figures appearing in each province indicate the distribution of stable food stocks as of 1 October 1946. An accompanying graph provides a breakdown by province showing the relation of Korean grown rices, to other staple foods produced in Korea or imported from the U.S.

Reference copies of the document in which this map appears are available in Reference, Department of State.

(172) Urban Retail Price Indexes, 1:9,000,000, October 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 22 in Summation No. 13, of U.S. Army Military Government Activities in Korea, October 1946).

This is a series of six small-scale maps covering South Korea. The group facilitates comparison of retail prices in different cities.

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A circle is printed near each of 5 major cities (Seoul, Taegu, Bejon, Kwangju, and Pusan), The size of the circle is proportional to the price of a particular commodity in the city. Each of the six maps deals with a different commodity (rice, fish, soy sauce, sweet potatoes, cotton cloth, rubber shoe, charcoal, and laundry soap).

Reference copies of the document in which these maps appear are available in Reference, Department of State.

(173) Criminal Offences South Korea Provinces, 1:9,000,000, Sept. 1946, General Headquarters, Commander-in-Chief, United States Army Forces, Pacific (Map No. 3 in Summation No. 12, United States Army Military Government Activities in Korea, September 1946).

This is a small-scale distribution map covering Korea south of the 38th parallel. Using provinces as statistical units, the yearly crime rate per 100,000 people is shown with five grades of distinctive shading.

Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(174) Provincial Retail Price Indexes, 1:9,000,000, October 1946, General Headquarters, Commander-in-Chief, U.S. Army Forces, Pacific (Map 23 in Summation No. 13, of U.S. Army Military Government Activities in Korea, October 1946).

This is a group of six small-scale maps covering Korea south of the 38th parallel. The series facilitates the comparison of September 1946 retail prices in different provinces.

A circle is printed in each province; the size of the circle is proportional to the price of a particular commodity in that province. Each of the six maps deals with a different commodity.

Reference copies of the document in which these maps appear are available in Reference, Department of State.

Usable black and white copies can be made.

(175) Distribution of Cultivation of Wheat, 1:10,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935 (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of wheat cultivation is indicated with each dot representing 500 hectares.

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress, (Call No. DS916.A5, 1935).

Usable black and white copies can be made.

(176) Distribution of [Rice] Paddy Fields, 1:10,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935 (English Text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are shown.

The distribution of the cultivation of two main types of rice is indicated with colored dots. Each dot represents 1,000 hectares.

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No. DS916.A5, 1935).

Black and white copies of limited usefulness can be made.

RESTRICTED

(177) Distribution of Cultivation of Barley and Rye, 1:10,000,000, after page 42: Thriving Chosen A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935. (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of rye and barley cultivation is indicated with red and black dots, each representing 500 hectares.

A reference copy of the volume in which this map appears is available in the Main Reading Room, the Library of Congress (Call No. DS916.A5, 1935).

No usable black and white copies can be made.

(178) Distribution of Cultivation of Italian Millet, 1:10,000,000, after page 42: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935 (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of Italian millet cultivation is indicated with each dot representing 500 hectares.

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No. DS916.A5, 1935).

Usable black and white copies can be made.

(179) Distribution of Cultivation of Cotton, 1:10,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935 (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of cotton cultivation is indicated with colored dots each representing 500 hectares. "Native cotton" and "upland cotton" varieties are distinguished.

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress. (Call No. DS916.A5, 1935).

Black and white copies of limited usefulness can be made.

(180) Distribution of Cocoons Produced, 1:10,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five years Administration, Government-General of Chosen, October 1935 (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of silkworm cocoon production is indicated with each dot representing 200 kuke (about 1,000 bushels).

The size of the circle appearing in each province is proportional to total number of selected silk worms in the provinces.

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No. DS916.A5, 1935).

Usable black and white copies can be made.

(181) Distribution of Cultivation of Soya Beans, 1:10,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935 (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of soya bean cultivation is indicated with each dot representing 500 hectares.

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No. DS916.A5, 1935).

Usable black and white copies can be made.

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(182) Distribution of Cultivation of Hemp, 1:10,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935 (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of hemp cultivation is indicated with each dot representing 500 hectares.

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No. DS916.A5, 1935).

Usable black and white copies can be made.

(183) Distribution of Apple Growing, 1:10,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935 (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of apple growing is indicated with 2 types of dots representing yearly apple production of 1,000,000 kan (about 3,700 tons) and 10,000 kan (about 37 tons).

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No. DS916.A5, 1935).

Usable black and white copies can be made.

(184) Distribution of Farmyard Fowls, 1:10,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935 (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of chickens and other domestic birds is indicated with colored dots representing 2000 head. "Native" and "selected" breeds are distinguished.

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No.: DS916.A5, 1935).

Black and white copies of limited usefulness can be made.

(185) Distribution of Pear Growing, 1:10,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of pear tree cultivation is indicated with each dot representing yearly pear production of 10,000 kan (about 37 tons).

(about 37 tons).

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No.: DS916.A5, 1935).

Usable black and white copies can be made.

(186) Distribution of Grape Growing, 1:10,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935 (English text).

This is a small-scale distribution map covering all of Korea. Province boundaries are located.

The distribution of grape cultivation is indicated with each dot representing yearly grape production of 10,000 kan (about 37 tons).

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No.: DS8916.A5, 1935).

Usable black and white copies can be made.

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(187) Distribution of Cultivation of Potatoes, 1:10,000,000, after page 42: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen October 1935 (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of potato cultivation is indicated with colored dots representing yearly potato production of 100,000 kan (about 370 tons). "Native" and "selected" varieties are distinguished.

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No: DS916.A5, 1935).

Black and white copies of limited usefulness can be made.

(188) Distribution of Horses, Donkeys, Mules, Goats, Sheep, 1:10,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935 (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of horses and other animals is shown with colored dots of two sizes representing 10,000 or 1,000 head.

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No.: DS916.A5, 1935).

Black and white copies of limited usefulness can be made.

(189) Distribution of Pigs, 1:10,000,000, after page 42: Thriving Chosen, A Survey of Twenty-Five Years Administration; Government-General of Chosen, October 1935 (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of swine is shown with each dot representing 400 animals.

Colored dots distinguish "native" and "selected" breeds.

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No.: DS916.A5, 1935).

Black and white copies of limited usefulness can be made.

(190) Distribution of Cattle (Oxen), 1:10,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935 (English text).

This is a small-scale dot distribution map covering all of Korea. Province boundaries are located.

The distribution of cattle is shown with each dot representing 500 head.

Male and female animals are distinguished.

A reference copy of the volume in which this map appears is available in the Main Reading Room, Library of Congress (Call No.: DS916.A5, 1935).

Black and white copies of limited usefulness can be made.

(191) Rainfall according to Locality, 1:5,000,000, after page 42 in: Thriving Chosen, A Survey of Twenty-Five Years Administration, Government-General of Chosen, October 1935 (English text).

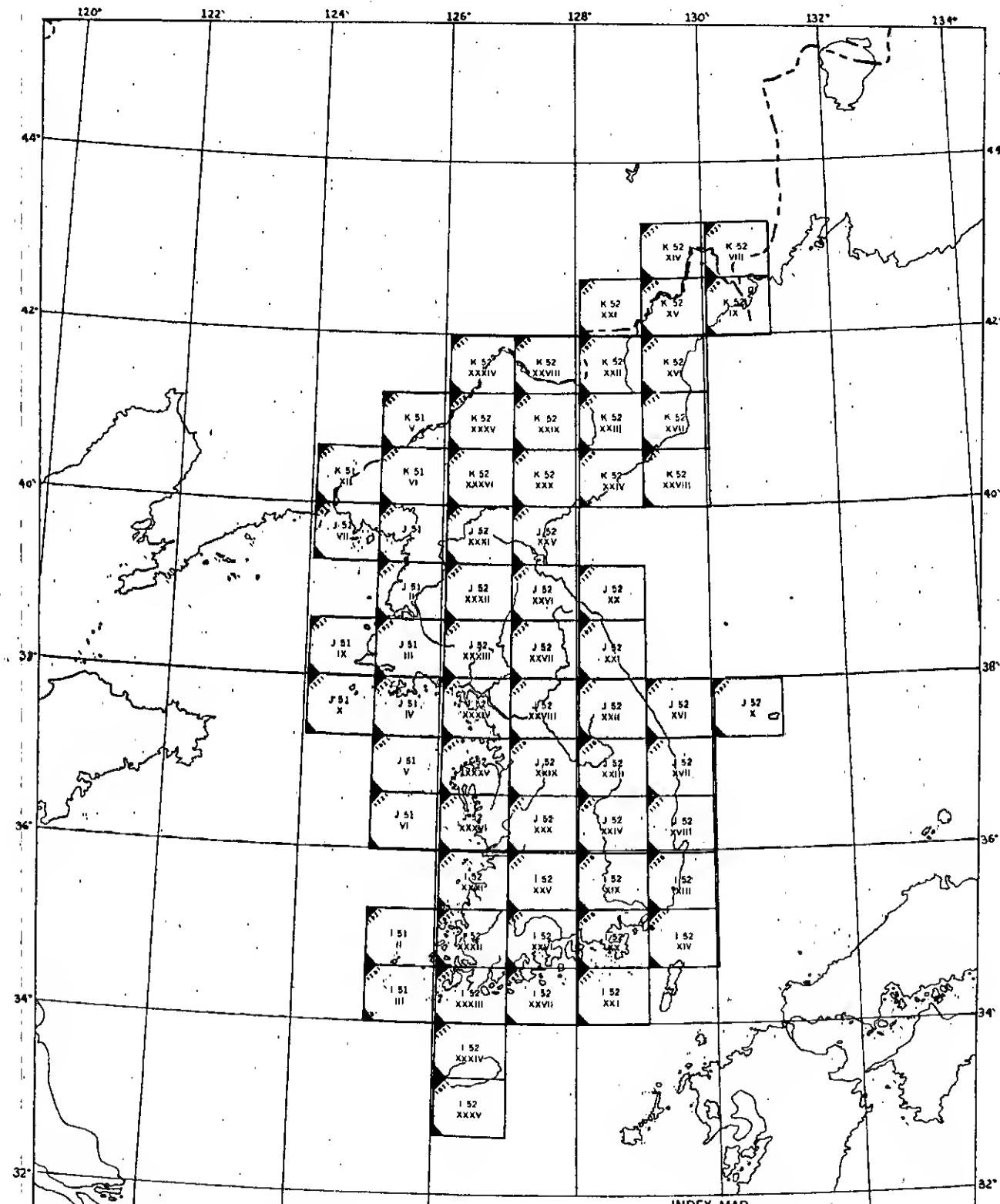
This is a useful rainfall map covering all of Korea. Province boundaries are located. The country's average annual rainfall is shown with numbered lines delimiting zones having equal precipitation. The distribution pattern is clearly shown by distinctive shading keyed to a legend indicating rainfall in millimeters.

A reference copy of the volume in which this map appears is available in the main Reading Room, Library of Congress (Call No.: DS916.A5, 1935).

Usable black and white copies can be made.

(192) Korea 1:200,000, 1918-1937, Japanese Imperial Land Survey (Japanese text).

This 65 sheet series compiled in 1918 and revised at various dates up to about 1937, was published by the Japanese Imperial Land Survey and copyrighted by



DATE CODE

S 40 = Surveyed in 1940.
 M 40 = Compiled in 1940.
 P 40 = Published or printed in 1940.
 R 40 = Reprinted in 1940.
 V 40 = Revised in 1940.
 (40) = Received in 1940 at A.M.S.
 C = Approximate data.

NOTE:

Coded dates are shown only for those maps Coded after Publication of the Second Edition of Theatre Indices.

120°

122°

124°

126°

128°

130°

132°

134°

A.M.S., O.C.E.-L

INDEX MAP

of

KOREA

Scale 1:200,000

LEGEND

On tile at AMS
 Date of Map

Published by
 Japanese General Staff
 On tile at AMS

AMS File No.
 Korea
 S29-JGS-200
 Korea
 S29-JGS-200/T

JANUARY 1945

RESTRICTED

the Government-General of Chōsen. The set was compiled largely from the 1:50,000 series -- map (113) in this report -- and served for many years as the standard medium scale map of Korea.

On most sheets, relief is depicted with contours at 50 meter intervals and occasional auxiliary contours at 25 meters. Triangulation points are located and spot heights are given in meters. Coastal features such as salt pans, mud flats, sand flats, and swamps receive considerable emphasis.

Rice growing areas are located but little additional agriculture or vegetation data are presented.

The cultural information is much less complete than on the 1:50,000 series.

Four classes of roads (first, second, third, unclassified) and three classes of railroads (trunk, light, special) are shown. To (province), pu (major city), kun (county or district) and myon (township) boundaries are located. The capitals of the various political units are designated.

Additional symbols identify such features as police stations, military posts, schools, factories, mines, shrines, banks, markets, lighthouses, and ports.

Reference copies of all sheets are available in the Map Library, Army Map Service.

(193) Mineral Resources of Southern Korea, National Resources Section, Report #84 Supreme Commander for the Allied Powers, Tokyo, 28 July 1947.

This is a 50 page summary dealing with the mineral resources of South Korea. It is useful in interpreting maps and other reference materials on this subject particularly because of its recent data on the volume of mineral production.

Information on ore quality, production, value, and reserves are given for all minerals occurring in any quantity.

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Simple outline maps show locations of deposits of the following:

asbestos
coal and iron
copper and cobalt
fluorite and pyrophyllite
gold and silver
graphite (amorphous and crystalline)
lead and zinc
tungsten and molybdenum

Numbers appearing on the maps near mineral deposit symbols are keyed to marginal tables giving names of mines or names of nearby settlements. Province (do) boundaries are located but no other cultural data are included.

A reference copy of this report is available in Reference, Department of State (Call No. B095.2, Z1442, No. 84/47).

(194) Korean Iron and Steel Industry, 1:8,000,000, 1946, Fig. 16, in Iron and Steel Metallurgy of the Japanese Empire, Natural Resources Section Report #50, General Headquarters, Supreme Commander for the Allied Powers, Tokyo.

This is a simple sketch map covering all of Korea. The distribution of large blast furnace units, small blast furnace units, steel plants, rotary kilns, and iron mines is indicated with symbols. Figures appearing beside the symbol for small blast furnaces indicate the number of such units near the named locality. No internal political divisions are shown and only towns associated with the iron and steel industry are named. The accompanying text material aids in interpreting the map.

A reference copy of the document in which this map appears is available in Reference, Department of State.

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The map will yield usable black and white copies.

(195) Manchuria, 1:500,000, 1943-45, Army Map Service, (AMS L401)

This medium scale topographical series covers Korea north of the 40th parallel and nearly all of Manchuria. Although the data on northern Korea is not as complete and reliable as that offered by map (123) Korea, 1:250,000, AMS L551 (AMS 2), the 1:500,000 series is still useful in considering problems related to the Korea-Manchuria border. Five sheets provide nearly complete coverage for the frontier zone.

The map was compiled largely from the Japanese Imperial Land Survey set scaled at 1:500,000. Information from other maps and intelligence reports was used to revise the cultural data, particularly communications.

On most of the border sheets relief is indicated with numbered contours at 100 meter intervals but for a few areas approximate contours or form lines are used. Each fifth contour is accentuated and a fair selection of spot heights is presented.

Roads (four classes), trails, and railroads (three gauges, electrified, double or single track) are identified with distinctive symbols. An elaborate system of symbols is also provided for the identification of airfields and related radio facilities.

Province boundaries in both Korea and Manchuria are located and six classes of towns and cities are shown. The legend provides a symbol for the identification of power transmission lines as well as telephone and telegraph lines. Mine sites are also identified.

Copies of all sheets are available at Map Library, Army Map Service, and at the Map Branch, CIA.

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(196) Japanese Soils, 1:3,000,000, Oct. 1943, AC/AS Intelligence.

This is a highly generalized soil map covering all of Korea and Japan. Five main soil types are identified with distinctive colors. The line or dot patterns in which colors are printed, denotes the parent rock type (e.g. "igneous rocks and crystalline schists, sedimentary rocks, Pleistocene and Recent deposits").

The map includes coordinates printed at 2° intervals but presents no cultural data (towns, political boundaries, or transportation) which might aid in the orientation of the soil information.

A limited number of copies are available in the Map Branch, CIA.

No usable black and white copies can be made.

(197) Important Mines, Oil, and Metallurgical Plants of Korea (Chosen), 1:1,625,000, Oct. 1945, compiled by the Foreign Minerals Division, Bureau of Mines, United States Department of Interior (Map No. 142).

Although this map, which covers all of Korea, is based on data assembled during the war, it still presents a reasonably reliable picture of the distribution of mineral deposits, mines, and mineral processing installations.

Iron and steel plants, synthetic oil plants, and oil refineries are located on the map by symbol. Other symbols, identifying metallurgical plants, refineries, smelters, mines and deposits, are printed in the margins and connected by line to the presumed map location of the deposit, mine, or plant. Code letters, identifying the mineral, appear in each symbol along with numbers keyed to a marginal list giving either the name of the deposit or installation or the name of the nearest town.

The map presents data on the following minerals:

aluminum	fluorspar	molybdenum
alunite	gold	nickel

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asbestos	graphite	phosphate
barite	iron	salt
chrome	lead	tungsten
coal	magnesium	vanadium
cobalt	magnesite	zinc
copper	manganese	
	mica	

To (province) boundaries are located and both romanized Korean and romanized Japanese place name forms are given in the marginal list.

Copies are available in limited quantities through the Foreign Minerals Division, Bureau of Mines, U.S. Department of Interior.

(198) Electric Power of Korea, Feb. 1945, Strategic Intelligence Branch, Military Intelligence Division Office, Chief of Engineers, U.S. Army (S.E.S. 157).

Although this useful summary is based on information assembled during the war, it still presents a fairly reliable picture of the important facts regarding Korea's electric power installations.

The main maps included in the study are as follows:

Plate 1, Electric Power Stations of Korea, 1:1,500,000.

This appears to be the most important map of the study. It covers all of Korea locating power main plants by symbol (size of the symbols indicates kilowatt output). Where there are several power stations in or near the same town their combined capacity is shown by a single symbol and the total number of plants is indicated by a number appearing near the symbol.

Proposed plants are differentiated from those in operation. Important power lines are portrayed and such features as substations and switching stations are located.

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Main towns are named and to (province) boundaries are shown on an inset.

The map will yield useable black and white reproductions.

Fig. 5. Map Showing Location and Profile of the Chōshin-Kō Development (Chōshin-ko Power Stations Nos. 1, 2, 3, and 4.)

This is an analytical location sketch and elevation profile covering the main power plants of the Changjin (Chōshin) power development about 35 miles northwest of Hungnam (Kōnan).

Fig. 10. Air View and Orientation Map Showing the Location of the Chōshin-ko No.1, Power Station.

An oblique air photo accompanies a location map prepared by reproducing a portion of a 1:50,000 topographical sheet. The power station is located 35 miles northwest of Hungnam (Kōnan).

Fig. 24. Fusan, Plan of Port and Town, 1:15,000.

Fig. 32. Map of Heijo Showing the Location of the Heijo (H.E.C.) Power Station and Heijo (C.P.C.) Power Station.

Fig. 33. Map of the Jinsen Area Showing the Location of the Jinsen (Chemulpo) Power Station.

Fig. 34. Map of Kōnan City Showing the Location of the Konan Power Station.

The sketchy city plans noted above (figures 24, 32, 33, and 34) were prepared to emphasize the locations of power installations. As general city plans they offer nothing that is not covered to better advantage on the plans noted in Section IX, CITY PLANS.

In addition to the maps cited above, this strategic engineering study includes reproductions of (66) Korea, Primary Centers of Industry, Power, and Mines, 1:3,000,000, as well as (67) Choshin-Fusen Hydraulic Power Plants and Konan Nitrogen Fertilizer Plant in Korea, n.s.

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The study includes numerous photographs, plant diagrams, and statistical tables. Nearly every important power plant in Korea is described in some detail. The text and statistical material are helpful in interpreting either the maps included in the study or other maps of Korea's electric power plants.

Reference copies of this work are available in Reference, Department of State; The Map Branch, CIA and in numerous other Government offices.

(199) United States Hydrographic Charts, United States Navy Department, Hydrographic Office, various scales and dates.

The United States Hydrographic Office has compiled some 30 charts which provide complete coverage for Korea's coasts. The bulk of the data has been derived from Japanese surveys conducted between 1894 and 1935. Nearly all of the American charts have been revised since 1940.

Most U.S. charts covering Korea are scaled at about 1:70,000 but there are also charts covering major sections of the coast, which range in scale from 1:250,000 to 1:700,000. Harbor approaches, ports, anchorages, or other places of importance are covered by plans scaled at about 1:20,000.

The navigational information includes coordinates, magnetic variation data, compass dials, soundings in fathoms, and selected submarine contours. Beacon lights (range, flash interval, and color indicated), buoys, radio direction finder stations, and radio beacons are located. Data on sea bottom composition and tides are also presented. Underlined figures on dry banks express height in feet above (spring tide) low water. Mud flats on other areas where the water is extremely shallow are tinted blue on most of the newer charts.

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Relief along the coast is generally indicated with form lines and spot heights in feet. Cliffs, shoals, sand bars, partially submerged rocks, salt pans, and marshes are effectively portrayed.

Where city or port areas are depicted, the street patterns are usually shown in some detail and a few of the more important installations are identified by name or function. Main roads, railroads, ferries, docks, piers, breakwaters, and dredged areas are located on numerous charts.

The marginal data include information on survey dates, a brief glossary of Japanese and Korsan generic terms, a fathoms to meter conversion table, as well as notes and tables pertaining to correction and revision.

Many of the charts carry an effective portrayal of undersea cables. This is particularly true of Nos. 3240, 3248, 5312, and 3241.

Distribution copies are available at the United States Hydrographic Office. Reference copies are available in the Map Branch, CIA, the Division of Maps, Library of Congress, and in other Government offices.

(200) Japanese Hydrographic Charts, Hydrographic Department of the Japanese Navy, various scales and dates (texts generally in both English and Japanese).

The Hydrographic Department of the Japanese Navy has published over 70 charts which provide complete coverage for Korea's coastal and estuarial waterways. These charts are based on original surveys conducted between 1890 and 1936, by either the Japanese Navy or the Government-General of Chosen.

Planning charts covering major portions of Korea are scaled at about 1:800,000. The intermediate navigation charts covering large segments of the coast are usually scaled at about 1:250,000 while the detailed charts covering places of

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particular interest range in scale from 1:100,000 to 1:10,000. The intermediate charts are marked at appropriate places with the numbers of the detailed plans covering harbor approaches, ports, anchorages, or other places of importance in the charted area.

The navigational information includes coordinates, magnetic variation data, compass dials, soundings in meters, and selected sea-depth contours. Beacons, buoys, and other signals are identified and landmarks of physical and cultural features are emphasized.

Relief along the coast is indicated with form lines and a good selection of spot heights in meters. Cliffs, shoals, sand bars, and partially submerged rocks are effectively shown but several recent, man-made, shoreline changes are not recorded on the charts now available in the United States.

The larger scale charts present a fair picture of land utilization along the coasts by identifying salt pans, forested areas, and cultivated land.

Where urban areas are depicted, the street pattern and buildings are generally shown in considerable detail with the more important installations identified by name or function. Main roads and railroads along the coast are located.

On the available charts, cultural information is often out-of-date for areas where industrial development was accelerated by Japan's war effort.

Several charts covering southeastern Korea (173, 196, 313, 1251, 1269, in particular) effectively portray the intricate undersea cable network in the Tsushima-Pusan area.

Chart 350 provides a good picture of the various channels and alluvial islands through which the Korea-China boundary threads its way at the mouth of the Yalu River.

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Reference copies of nearly all Japanese charts are on file at the United States Hydrographic Office.

(201) Korea, Ports, Landings, and Anchorages, 1:2,100,000, April 1945, Figure VI-93, JANIS 75.

This map was prepared especially to locate ports, landing places and anchorages. It covers all of Korea.

Distinctive symbols identify principal ports (along-side loading capacity over 1,000 long tons per day), secondary ports (alongside loading capacity less than 1,000 long tons per day), and other landings (no docking facilities for deep draft vessels). Anchorages are located with symbols keyed by number to Table VI-22, in the text, where each is briefly described.

To (province) boundaries are located but towns related to the port and landing data are named. No transportation data or other cultural information are presented.

Reference copies of Janis 75 are available in the Reference Division, OCD, Department of State and in numerous other United States Government offices.

(202) Important Cultural Sites, 1:5,000,000, 1946, General Headquarters, Commander-in-Chief, United States Army Forces, Pacific (Map No. 35 in Summation No. 12, United States Army Military Government Activities in Korea, September 1946).

This is a simple outline map covering all of Korea Province boundaries and main towns are located. The cultural information is overprinted in red.

Each town shown on the map is connected by line with a box in which the names of cultural sites are given. The type of site or institution is indicated by symbols appearing near the names. Buddhist temples, castles, museums, libraries, and parks are identified.

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Reference copies of the document in which this map appears are available in Reference, Department of State.

Usable black and white copies can be made.

(203) Japan, Korea and Formosa Showing Protestant Mission Stations, 1:2,700,000, 1923, The Protestant Education Movement of the U.S. and Canada.

This is a simple outline map covering Japan, Korea and Formosa. Towns having mission stations are located and town names are keyed to a marginal table where the church and nationality of the sponsoring group are indicated. Information on about 50 missions in Korea is presented.

Reference copies of the map are available in the Map Branch, CIA.

Usable black and white copies can be made.

(204) Distribution of Typhus in Korea, 1934-35, 1:12,500,000, Figure XI-4, Chapter XI, "Health and Sanitation," JANIS 75, April 1945.

The typhus rate per 100,000 people is indicated with distinctive shading on two small-scales sketch maps which use to (provinces) as statistical units. One of the maps presents data for 1934, the other for 1935. On a third map, the provinces are named.

Reference copies of the volume in which these maps appear are available in Reference, Department of State and in numerous other Government offices.

The items noted above will yield usable black and white copies.

(205) Japanese Fisheries Map, 1:3,000,000, 1936, The Marine Products News Agency, Tokyo (Japanese text).

This is a wall map presenting an extremely detailed breakdown of the fisheries of the former Japanese Empire. Japan, Korea, Formosa, Sakhalin, Kamchatka, and their adjoining seas are covered.

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Colored symbols, each representing a catch value of approximately 10,000 yen, identify the types of fish caught and indicate the relative importance of the different fishing areas. A variety of shore installations such as fishing harbors, light houses, processing plants, fishery schools, markets, canneries, bait factories, and ice plants are identified.

Various accompanying figures and graphs summarize the development of the Japanese fishing industry between 1898 and 1936. They also provide a breakdown of the average yearly catch in terms of yen value, types of fish caught, and use (foodstuff, non-foodstuff, etc.).

An inset shows world fishing grounds and specially identifies areas where Japanese fishermen (regardless of citizenship) were active in 1936. Both the inset and the main map include considerable data on whaling.

Generalized submarine contours are located and distinctive colored arrows identify ocean currents.

A reference copy of this map is available in the Map Branch, CIA.

No usable black and white copies can be made.

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